

# Product Catalogue

- + Spectrum Analyzers
- + Digital Storage Oscilloscopes
- + Arbitrary Waveform Generators
- + Programmable DC Power Supplies
- + PC Oscilloscopes
- + Digital Multimeters

**OWON**<sup>®</sup> product line - Created by **LILLIPUT**<sup>®</sup>

Fujian Lilliput Optoelectronics Technology Co., Ltd.

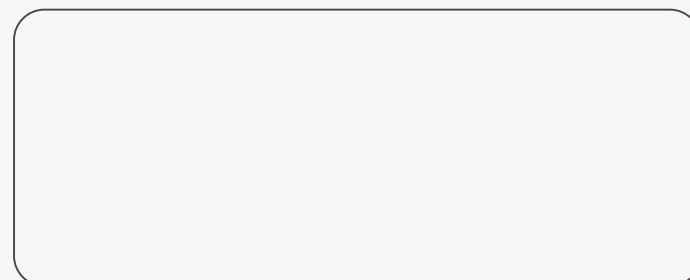
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Please contact your local distributor for further information.





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# About OWON®

Since 1990, Lilliput steps into the electronics product industry, its 1st product series is a mini color LCD.

Owned by Lilliput, OWON's product line was created to "Meet your best need" in the test and measurement equipment field.

Through 2 decades' of efforts, Lilliput gradually grew to be a group corporation, covering 3 product lines - mini color LCD, test and measurement equipment, and home energy management system.

OWON's products can be found in Asia, North America, Europe, South America, Oceania, and Africa, with global partners established in more than 80 countries/ regions.

Lilliput (OWON) spares no efforts to be one of top test and measurement equipment original equipment manufacturers in the world.





## your powerful n-in-1 on-site measurement station



# 14 / 12 bits

## high resolution ADC

### Super Performance

- + 8-bit, 12-bit or 14-bit high resolution ADC, restoring the waveform detail fully
- + max 40M record length, and max 75,000 wfms/s waveform refresh rate
- + low background noise, vertical sensitivity in 1 mV/div - 10 V/div
- + multi-trigger, and bus decoding function
- + SCPI, and LabVIEW supported

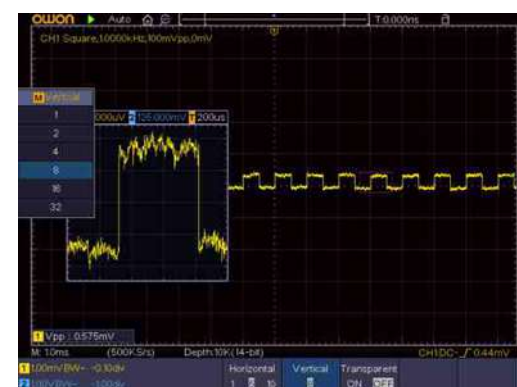
### Creative New Look

- + ultra-thin body-design, less space accommodation
- + multi-interface integration - USB host, USB device, USB port for PictBridge, LAN, AUX, and more
- + VGA port - better solution for video expansion, and teaching demonstration
- + 8 inch 800 x 600 high resolution LCD
- + optional multi-point touch screen, more user-friendly operation experience

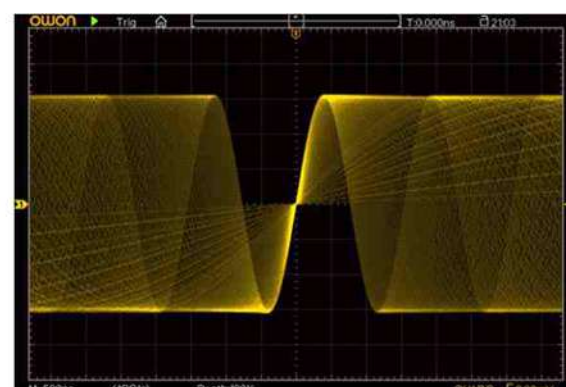
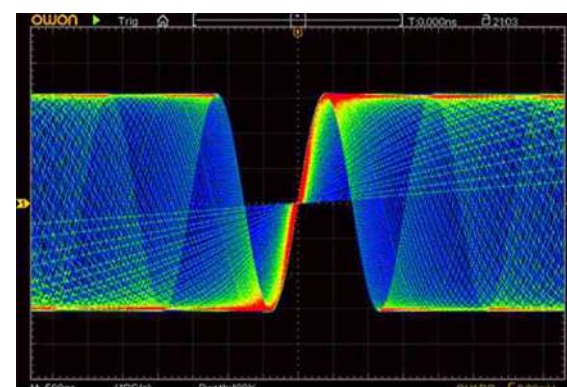
### n-in-1

functions as data logger, and multimeter with data logging function, and dual-channel 25MHz / 50MHz arbitrary waveform generator, furthermore, battery pack, and WiFi module supported

1. XDS series introduce 12 / 14 bits hardware ADC, the precision is 16/64 times against other oscilloscope on market. Equipping with OWON's original magnifier function, it can observe the signal low down to 31.25μV/div (XDS3202A, XDS3102AP).

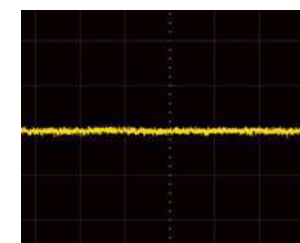


2. multi-level grayscale, and color temperature display



## your powerful n-in-1 on-site measurement station

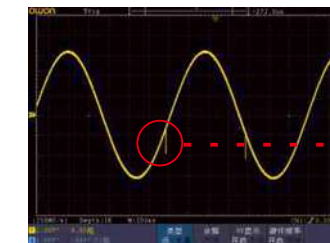
3. Xvisual platform - restore the waveform detail fully



low background noise

| M.Length |
|----------|
| 1000     |
| 10K      |
| 100K     |
| 1M       |
| 10M      |
| 20M      |
| 40M      |

40M record length



and 75,000 wfms/s refresh rate, easily capturing exceptional, and low probability events

4. multi-trigger supported - Logic, Time-out, I<sup>2</sup>C, SPI, RS232/UART, Runt, Windows, Nth Edge, and CAN

5. serial bus coding available in I2C, SPI, RS232/UART, CAN

| MBus Type |
|-----------|
| RS232     |
| I2C       |
| SPI       |
| CAN       |

| M.Single |
|----------|
| Edge     |
| Video    |
| Pulse    |
| Slope    |
| Runt     |
| Windows  |
| Timeout  |
| Nth Edge |

6. built-in multimeter module, with auto-scale, and data logging function

7. built-in dual-channel 25MHz / 50MHz arbitrary waveform generator module, with sample rate of 125MS/s / 250MS/s



8. its built-in WiFi module facilitates mobile device connecting with XDS series product, to get access to remote control, together with simultaneous measurement result display



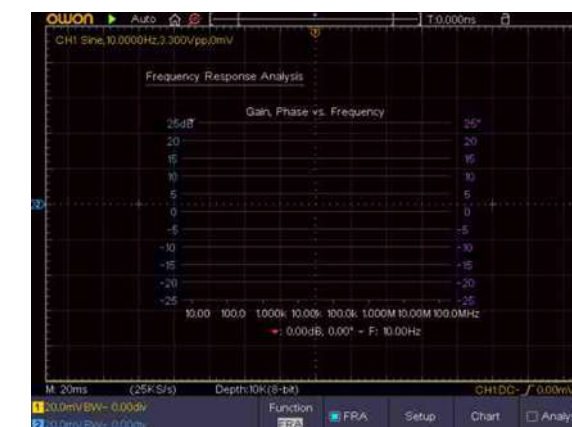
via app s/w, waveform data-saving, checking, co-sharing is possible, co-analyzing hence realizes

9. its multi-point touchscreen improves operation efficiency considerably



### 10. Bode plot function

The oscilloscope with built-in signal generator is equipped with FRA (Frequency Response Analysis) function, which can test the frequency response curve or loop stability of the DUT (device under test).



your powerful n-in-1 on-site measurement station

| Model                     | XDS3062A                                                                                                                                                                                                                                                             | XDS3102A | XDS3102AP*          | XDS3202A* | XDS3102             | XDS3202E | XDS3202*            | XDS3302* |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|-----------|---------------------|----------|---------------------|----------|
| Bandwidth                 | 60MHz                                                                                                                                                                                                                                                                | 100MHz   | 100MHz              | 200MHz    | 100MHz              | 200MHz   |                     | 300MHz   |
| Channel                   | 2+1 (external)                                                                                                                                                                                                                                                       |          |                     |           |                     |          |                     |          |
| Sample Rate               | 1GS/s                                                                                                                                                                                                                                                                |          |                     |           | 1GS/s               |          | 2GS/s               | 2.5GS/s  |
| Vertical Resolution (A/D) | 12 bits                                                                                                                                                                                                                                                              |          | 14 bits             |           | 8 bits              |          |                     |          |
| Record Length             | 40M                                                                                                                                                                                                                                                                  |          |                     |           |                     |          |                     |          |
| Waveform Refresh Rate     | 75,000 wfms/s                                                                                                                                                                                                                                                        |          |                     |           |                     |          |                     |          |
| Horizontal Scale          | 2ns/div - 1000s/div                                                                                                                                                                                                                                                  |          | 1ns/div - 1000s/div |           | 2ns/div - 1000s/div |          | 1ns/div - 1000s/div |          |
|                           | step by 1 - 2 - 5                                                                                                                                                                                                                                                    |          |                     |           |                     |          |                     |          |
| Input Impedance           | 1MΩ ± 2 %, in parallel with 15pF ± 5pF; (*50Ω ± 2%)                                                                                                                                                                                                                  |          |                     |           |                     |          |                     |          |
| Vertical Sensitivity      | 1mV/div - 10V/div (at input)                                                                                                                                                                                                                                         |          |                     |           |                     |          |                     |          |
| DC Gain Accuracy          | ±1.5%                                                                                                                                                                                                                                                                |          |                     |           | ±3%                 |          |                     |          |
| Sample Rate/Relay Time    | ± 1ppm(type,Ta= +25°C)                                                                                                                                                                                                                                               |          |                     |           |                     |          |                     |          |
| Trigger Type              | Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I²C, SPI, and RS232/UART                                                                                                                                                                         |          |                     |           |                     |          |                     |          |
| Trigger Type (optional)   | CAN                                                                                                                                                                                                                                                                  |          |                     |           |                     |          |                     |          |
| Bus Decoding (optional)   | I²C, SPI, RS232/UART, and CAN                                                                                                                                                                                                                                        |          |                     |           |                     |          |                     |          |
| Waveform Math             | +, -, x, ÷, FFT, FFT rms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass,bandreject)                                                                                                                                        |          |                     |           |                     |          |                     |          |
| Automatic Measurement     | Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Duty Cycle, Delay A→B↵, Delay A→B↗, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count |          |                     |           |                     |          |                     |          |
| Communication Interface   | USB, Pass/Fail, LAN, VGA(optional)                                                                                                                                                                                                                                   |          |                     |           |                     |          |                     |          |
| Frequency Counter         | √                                                                                                                                                                                                                                                                    |          |                     |           |                     |          |                     |          |
| Power Supply              | 100V-240VAC, 50/60Hz, CATII< 15W                                                                                                                                                                                                                                     |          |                     |           |                     |          |                     |          |
| Fuse                      | 2A, Tclass, 250V                                                                                                                                                                                                                                                     |          |                     |           |                     |          |                     |          |
| Dimension (WxHxD)         | 340x177x90(mm)                                                                                                                                                                                                                                                       |          |                     |           |                     |          |                     |          |
| Device Weight             | 2.6kg                                                                                                                                                                                                                                                                |          |                     |           |                     |          |                     |          |

+ Optional Module / Function

|     |                               |            |              |
|-----|-------------------------------|------------|--------------|
| VGA | VGA + AV port                 | RS232/UART | RS232/UART   |
| WIF | Wi-fi                         | SPI        | SPI          |
| AWG | arbitrary waveform generator  | I2C        | I²C          |
| DMM | digital multimeter            | CAN        | CAN decoding |
| TOU | touch screen (capacitor-type) |            |              |
| BAT | Battery(3.7V 13200mAh)        |            |              |

Arb Waveform Generator (optional) Specifications

|                      |                                                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Max Frequency Output | 25MHz                                                                                                                                        |
| Sample Rate          | 125MS/s                                                                                                                                      |
| Channel              | 1 channel (apply to XDS3104(A), XDS3204E(AE))<br>2 channels (only for XDS3000 series 2 channels model)                                       |
| Vertical Resolution  | 14 bits                                                                                                                                      |
| Amplitude Range      | 2mVpp - 6Vpp                                                                                                                                 |
| Waveform Length      | 8K                                                                                                                                           |
| Standard Waveform    | Sine, Square, Pulse, Ramp                                                                                                                    |
| Arbitrary Waveform   | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, Noise, and others, total 46 built-in waveforms, and user-defined arbitrary waveform |

| Model                     | XDS3064E                                                                                                                                                                                                                                                                                                        | XDS3104E | XDS3064AE | XDS3104AE | XDS3104A                               | XDS3104 | XDS3204AE | XDS3204E |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|-----------|----------------------------------------|---------|-----------|----------|
| Bandwidth                 | 60MHz                                                                                                                                                                                                                                                                                                           | 100MHz   | 60MHz     | 100MHz    |                                        |         | 200MHz    |          |
| Channel                   | 4                                                                                                                                                                                                                                                                                                               |          |           |           |                                        |         |           |          |
| Sample Rate               | 1GS/s                                                                                                                                                                                                                                                                                                           |          |           |           |                                        |         |           |          |
| Vertical Resolution (A/D) | 8 bits                                                                                                                                                                                                                                                                                                          |          | 14 bits   |           |                                        | 8bits   | 14 bits   | 8bits    |
| Record length             | 40M                                                                                                                                                                                                                                                                                                             |          |           |           |                                        |         |           |          |
| Waveform Refresh Rate     | 45,000 wfms/s                                                                                                                                                                                                                                                                                                   |          |           |           | 70,000wfms/s                           |         |           |          |
| Horizontal Scale (s/div)) | 2ns/div - 1000s/div, step by 1 - 2 - 5                                                                                                                                                                                                                                                                          |          |           |           | 1ns/div - 1000s/div, step by 1 - 2 - 5 |         |           |          |
| Input Impedance           | 1MΩ ± 2%, in parallel with 15pF ± 5pF                                                                                                                                                                                                                                                                           |          |           |           |                                        |         |           |          |
| Vertical Sensitivity      | 1mV/div - 10V/div (at input)                                                                                                                                                                                                                                                                                    |          |           |           |                                        |         |           |          |
| DC Gain Accuracy          | ±3%                                                                                                                                                                                                                                                                                                             |          |           |           |                                        |         |           |          |
| Sample Rate / Relay Time  | ±2.5ppm (type, Ta= +25°C)                                                                                                                                                                                                                                                                                       |          |           |           |                                        |         |           |          |
| Trigger Type              | Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, and RS232/UART                                                                                                                                                                                                                    |          |           |           |                                        |         |           |          |
| Trigger Type (optional)   | CAN                                                                                                                                                                                                                                                                                                             |          |           |           |                                        |         |           |          |
| Bus Decoding(optional)    | I2C, SPI, RS232/UART, CAN                                                                                                                                                                                                                                                                                       |          |           |           |                                        |         |           |          |
| Waveform Math             | +, -, *, / ,FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)                                                                                                                                                                                  |          |           |           |                                        |         |           |          |
| Automatic Measurement     | Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Duty Cycle, Delay A→B↕, Delay A→B↗, Phase A→B↕, Phase A→B↗, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edges Count, Area, Cycle Area |          |           |           |                                        |         |           |          |
| Communication Interface   | USB host, USB device, Trig Out (P/F), LAN, and VGA (optional)                                                                                                                                                                                                                                                   |          |           |           |                                        |         |           |          |
| Frequency Counter         | √                                                                                                                                                                                                                                                                                                               |          |           |           |                                        |         |           |          |
| Power Supply              | 100V - 240V AC, 50/60Hz, CAT II                                                                                                                                                                                                                                                                                 |          |           |           |                                        |         |           |          |
| Fuse                      | 2A, T class, 250V                                                                                                                                                                                                                                                                                               |          |           |           |                                        |         |           |          |
| Battery (optional)        | 3.7V, 13200mA                                                                                                                                                                                                                                                                                                   |          |           |           |                                        |         |           |          |
| Dimension (W x H x D)     | 340mmx177mmx90mm                                                                                                                                                                                                                                                                                                |          |           |           |                                        |         |           |          |
| Device Weight             | 2.8kg                                                                                                                                                                                                                                                                                                           |          |           |           |                                        |         |           |          |

Multimeter (optional) Specifications

|                    |                                                                                                                                                               |                 |                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| Full Scale Reading | 3¾ digits (max 4000 count)                                                                                                                                    | Diode           | 0V -1.5V          |
| Input Impedance    | 10MΩ                                                                                                                                                          | Continuity Test | <50 (±30) beeping |
| Capacitance        | 51.2nF - 100uF: ±(3% ± 3 digits)                                                                                                                              |                 |                   |
| Voltage            | DCV: 400mV, 4V, 400V: ±(1 ± 1 digit); max input: DC 1000V<br>ACV: 4V, 40V, 400V: ±(1 ± 3 digits); frequency: 40Hz - 400Hz; max input: AC 750V (virtual value) |                 |                   |
| Current            | DCA: 40mA, 400mA: ±(1.5% ± 1 digit); 10A: ±(3% ± 3 digits)<br>ACA: 40mA: ±(1.5% ± 3 digits), 400mA: ±(2% ± 1 digit), 10A: ±(3% ± 3 digits)                    |                 |                   |
| Impedance          | 400Ω: ±(1% ± 3 digits),4KΩ - 40MΩ: ±(1% ± 1 digit)                                                                                                            |                 |                   |

+ Accessories    The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Probe



Probe Adjust

optional accessories:



Multimeter Lead



Q9



Capacitance Ext Module



Battery



Soft Bag



mobile app accessible via scanning QR code



SDS Series Deep Memory Digital Storage Oscilloscope



10M  
Record Length

- + Bandwidth : 60MHz - 300MHz with dual-channel
- + Sample rate : 500MS/s - 3.2GS/s
- + 10M record length for each channel
- + Smart design with easy portability
- + Large 8 inch 800 x 600 pixels LCD
- + LAN remote control
- + Multi-function : auto-scale, Pass / Fail, current measurement, and **digital filtering**
- + SCPI, and LabVIEW supported

CE

VGA

LAN

USB

WAVE RECORD

FFT

| Model                     | SDS6062                                                                                                                                                                                              | SDS7072                               | SDS7102 | SDS7202                               | SDS8102 | SDS8202 | SDS8302 | SDS9302 |  |  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------|---------------------------------------|---------|---------|---------|---------|--|--|
| Bandwidth                 | 60MHz                                                                                                                                                                                                | 70MHz                                 | 100MHz  | 200MHz                                | 100MHz  | 200MHz  |         | 300MHz  |  |  |
| Channel                   | 2 + 1 (external)                                                                                                                                                                                     |                                       |         |                                       |         |         |         |         |  |  |
| Sample Rate               | 500MS/s                                                                                                                                                                                              | 1GS/s                                 |         | 2GS/s                                 |         | 2.5GS/s | 3.2GS/s |         |  |  |
| Horizontal Scale (s/div)  | 5ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                                                                | 2ns/div - 100s/div, step by 1 - 2 - 5 |         | 1ns/div - 100s/div, step by 1 - 2 - 5 |         |         |         |         |  |  |
| Rise Time                 | ≤5.8ns                                                                                                                                                                                               | ≤5ns                                  | ≤3.5ns  | ≤1.7ns                                | ≤3.5ns  | ≤1.7ns  | ≤1.17ns |         |  |  |
| Record Length             | 10M                                                                                                                                                                                                  |                                       |         |                                       |         |         |         |         |  |  |
| Display                   | 8" color LCD, 800 x 600 pixels                                                                                                                                                                       |                                       |         |                                       |         |         |         |         |  |  |
| Input Impedance           | 1MΩ ± 2%, in parallel with 15pF ± 5pF                                                                                                                                                                |                                       |         |                                       |         |         |         |         |  |  |
| Vertical Sensitivity      | 2mV/div - 10V/div                                                                                                                                                                                    |                                       |         |                                       |         |         |         |         |  |  |
| Vertical Resolution (A/D) | 8 bits (2 channels simultaneously)                                                                                                                                                                   |                                       |         |                                       |         |         |         |         |  |  |
| Trigger Type              | Edge, Pulse, Video, Slope, and Alternate                                                                                                                                                             |                                       |         |                                       |         |         |         |         |  |  |
| Digital Filtering         | low-pass, high-pass, band-pass, and band-reject                                                                                                                                                      |                                       |         |                                       |         |         |         |         |  |  |
| Automatic Measurement     | Vpp, Vavg, Vrms, Freq, Period, Peak RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, Delay A→B, Delay A→B, +Width, -Width, +Duty, -Duty, Duty cycle |                                       |         |                                       |         |         |         |         |  |  |
| Waveform Math             | +, -, *, /, invert, FFT                                                                                                                                                                              |                                       |         |                                       |         |         |         |         |  |  |
| Waveform Storage          | 15 waveforms                                                                                                                                                                                         |                                       |         |                                       |         |         |         |         |  |  |
| Measuring Current Range   | 100mA/V - 1KA/V                                                                                                                                                                                      |                                       |         |                                       |         |         |         |         |  |  |
| Communication Interface   | USB host, USB device, Pass / Fail, LAN, VGA (optional), and RS232 (optional)                                                                                                                         |                                       |         |                                       |         |         |         |         |  |  |
| Battery (optional)        | 7.4V, 8000mA                                                                                                                                                                                         |                                       |         |                                       |         |         |         |         |  |  |
| Dimension (W x H x D)     | 340 x 155 x 70 (mm)                                                                                                                                                                                  |                                       |         |                                       |         |         |         |         |  |  |
| Device Weight             | 1.80 kg                                                                                                                                                                                              |                                       |         |                                       |         |         |         |         |  |  |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.

Power Cord

CD Rom

Quick Guide

USB Cable

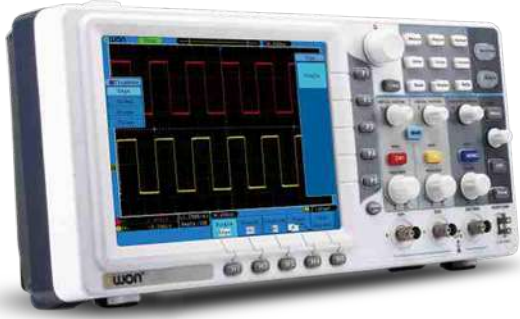
Probe

Probe Adjust

Battery (optional)

Soft Bag (optional)

SDS-E Series economical type digital storage oscilloscope



CE

VGA

LAN

USB

WAVE RECORD

FFT

- + Bandwidth : 30MHz - 125MHz
- + Sample rate : 500MS/s - 1GS/s
- + Ultra-thin body
- + 8 inch high resolution LCD
- + Pass / Fail function
- + SCPI, and LabVIEW supported
- + newly added function - digital filtering, and current measurement (excl. SDS5032E and SDS5052E)

| Model                     | SDS5032E                                                                                                                                                                                             | SDS5052E | SDS6062E                                        | SDS7072E                              | SDS7102E          | SDS7122E |  |  |  |  |  |  |  |  |  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------|---------------------------------------|-------------------|----------|--|--|--|--|--|--|--|--|--|
| Bandwidth                 | 30MHz                                                                                                                                                                                                | 50MHz    | 60MHz                                           | 70MHz                                 | 100MHz            | 125MHz   |  |  |  |  |  |  |  |  |  |
| Channel                   | 2 + 1 (external)                                                                                                                                                                                     |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Sample Rate               | 500MS/s                                                                                                                                                                                              |          |                                                 | 1GS/s                                 |                   |          |  |  |  |  |  |  |  |  |  |
| Record Length             | 10K                                                                                                                                                                                                  |          | 1M                                              |                                       | 1M (optional 10M) |          |  |  |  |  |  |  |  |  |  |
| Display                   | 8" color LCD, 800 x 600 pixels                                                                                                                                                                       |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Input Impedance           | 1MΩ ± 2%, in parallel with 15pF ± 5pF                                                                                                                                                                |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Horizontal Scale (s/div)  | 5ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                                                                |          |                                                 | 2ns/div - 100s/div, step by 1 - 2 - 5 |                   |          |  |  |  |  |  |  |  |  |  |
| Vertical Sensitivity      | 5mV/div - 5V/div (at input)                                                                                                                                                                          |          |                                                 | 2mV/div - 10V/div (at input)          |                   |          |  |  |  |  |  |  |  |  |  |
| Vertical Resolution (A/D) | 8 bits (2 channels simultaneously)                                                                                                                                                                   |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Trigger Type              | Edge, Pulse, Video, Slope, and Alternate                                                                                                                                                             |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Digital Filtering         | /                                                                                                                                                                                                    |          | low-pass, high-pass, band-pass, and band-reject |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Automatic Measurement     | Vpp, Vavg, Vrms, Freq, Period, Peak RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time, Delay A→B, Delay A→B, +Width, -Width, +Duty, -Duty, Duty cycle |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Waveform Math             | +, -, *, /, invert, FFT                                                                                                                                                                              |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Waveform Storage          | 15 waveforms                                                                                                                                                                                         |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Communication Interface   | USB host, USB device, Pass / Fail, LAN, and VGA (optional)                                                                                                                                           |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Dimension (W x H x D)     | 348 x 170 x 78 (mm)                                                                                                                                                                                  |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |
| Device Weight             | 1.50 kg                                                                                                                                                                                              |          |                                                 |                                       |                   |          |  |  |  |  |  |  |  |  |  |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.

Power Cord

CD Rom

Quick Guide

USB Cable

Probe

Probe Adjust

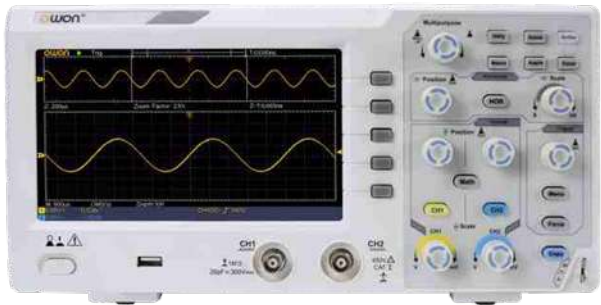
Soft Bag (optional)

06

07

owon Meeting your needs

SDS1000S Series super-economical type digital storage oscilloscope



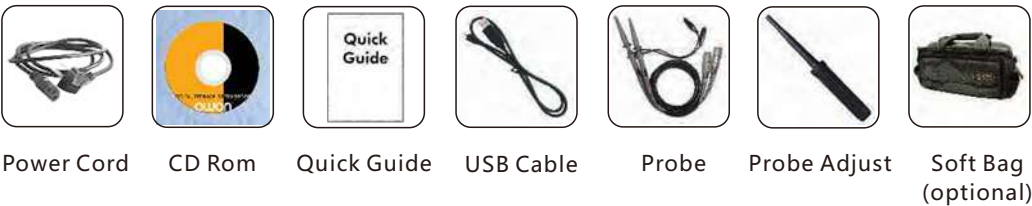
- + Bandwidth : 20MHz-200MHz
- + 2-Channel
- + Sample rate : 100MS/s - 1GS/s
- + Ultra-thin body
- + 7 inch high resolution LCD
- + SCPI, and LabVIEW supported



| Model                     | SDS1022                                                                                                                                                           | SDS1052                               | SDS1102 | SDS1202 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------|---------|
| Bandwidth                 | 20MHz                                                                                                                                                             | 50MHz                                 | 100MHz  | 200MHz  |
| Channel                   | 2                                                                                                                                                                 |                                       |         |         |
| Sample Rate               | 100MS/s                                                                                                                                                           | 500MS/s                               | 1GS/s   |         |
| Horizontal Scale (s/div)  | 5ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                             | 2ns/div - 100s/div, step by 1 - 2 - 5 |         |         |
| Display                   | 7" color LCD, 800 x 480 pixels                                                                                                                                    |                                       |         |         |
| Input Impedance           | 1MΩ ± 2%, in parallel with 20pF±5pF                                                                                                                               |                                       |         |         |
| Record Length             | 10K                                                                                                                                                               |                                       |         |         |
| Sample Rate / Relay Time  | ±100ppm                                                                                                                                                           |                                       |         |         |
| Vertical Resolution (A/D) | 8 bits (2 channels simultaneously)                                                                                                                                |                                       |         |         |
| Vertical Sensitivity      | 5mV/div - 5V/div (at input)                                                                                                                                       |                                       |         |         |
| Trigger Type              | Edge, Video                                                                                                                                                       |                                       |         |         |
| Automatic Measurement     | Vpp, Vavg, RMS, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Width, Overshoot, Pre-shoot, Rise time, Fall time, +Width, -Width, +Duty, -Duty, Delay A→B, Delay A→B |                                       |         |         |
| Waveform Math             | +, -, x, ÷, invert, FFT                                                                                                                                           |                                       |         |         |
| Waveform Storage          | 16 waveforms                                                                                                                                                      |                                       |         |         |
| Communication Interface   | USB host, USB device                                                                                                                                              |                                       |         |         |
| Frequency Counter         | available                                                                                                                                                         |                                       |         |         |
| Power Supply              | 100V - 240V AC, 50/60Hz, CAT II                                                                                                                                   |                                       |         |         |
| Dimension (W x H x D)     | 301 x 152 x 70 mm                                                                                                                                                 |                                       |         |         |
| Device Weight             | 1.10 kg                                                                                                                                                           |                                       |         |         |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



TDS Series Touch Screen Digital Storage Oscilloscope

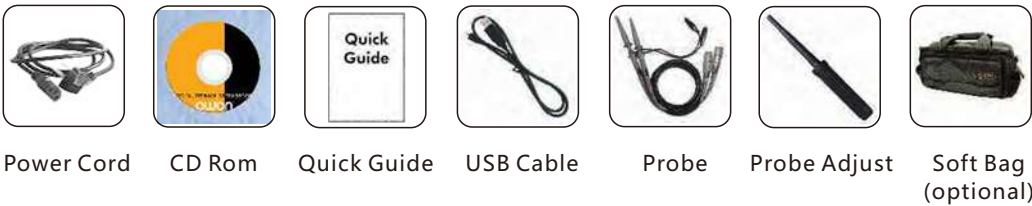


- + Max 200MHz bandwidth, up to 2GS/s realtime sample rate
- + 7.6M record length
- + 50,000 wfms/s waveform capture rate
- + waveform zooming (horizontal / vertical), and saving FFT points (length, and resolution variable)
- + multi-window extension
- + 8 inch 800 x 600 pixels high resolution LCD
- + multi- communication interface : USB, VGA, and LAN
- + LabVIEW supported

| Model                     | TDS7074                                                                                                                                                     | TDS7104 | TDS8104 | TDS8204 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|
| Bandwidth                 | 70MHz                                                                                                                                                       | 100MHz  |         | 200MHz  |
| Channel                   |                                                                                                                                                             | 4       |         |         |
| Sample Rate               | 1GS/s                                                                                                                                                       | 2GS/s   |         |         |
| Waveform Capture Rate     | 50,000 wfms/s                                                                                                                                               |         |         |         |
| Display                   | 8" color LCD                                                                                                                                                |         |         |         |
| Input Impedance           | 1MΩ ± 2%, in parallel with 15pF ± 5pF ; 50Ω ± 1%                                                                                                            |         |         |         |
| Record Length             | 7.6M                                                                                                                                                        |         |         |         |
| Horizontal Scale (s/div)  | 2ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                       |         |         |         |
| Vertical Resolution (A/D) | 8 bits (4 channels simultaneously)                                                                                                                          |         |         |         |
| Vertical Sensitivity      | 2mV/div - 10V/div (at input)                                                                                                                                |         |         |         |
| Trigger Type              | Edge, Pulse, Video, and Slope                                                                                                                               |         |         |         |
| Automatic Measurement     | Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B, Delay A→B, +Width, -Width, +Duty, -Duty |         |         |         |
| Waveform Math             | +, -, *, /, FFT                                                                                                                                             |         |         |         |
| Waveform Storage          | 4 reference waveforms                                                                                                                                       |         |         |         |
| Communication Interface   | USB host, USB device, VGA (optional), and LAN                                                                                                               |         |         |         |
| Power Supply              | 100 - 240 V AC, 50/60Hz, CAT II                                                                                                                             |         |         |         |
| Dimension (W x H x D)     | 380 x 180 x 115 (mm)                                                                                                                                        |         |         |         |
| Device Weight             | 1.50 kg                                                                                                                                                     |         |         |         |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



AS101 & AS201 Oscilloscope



- The best choice to replace an analogue oscilloscope
- + The simple control panel is similar to an analogue oscilloscope
  - + Bandwidth : 10MHz(AS101), 20MHz(AS201)
  - + Sample rate : 100MS/s
  - + 130,000 wfms/s waveform capture rate, easily capturing exceptional and low probability events
  - + 3.7" Colored LCD
  - + Compact case



| Model                                   |                               | AS101                                                  | AS201                       |
|-----------------------------------------|-------------------------------|--------------------------------------------------------|-----------------------------|
| Bandwidth                               |                               | DC:0-10MHz, AC: 10 Hz-10MHz                            | DC:0-20MHz, AC: 10 Hz-20MHz |
| Channel                                 |                               | 1                                                      |                             |
| Horizontal system                       | Sample Rate                   | 100MS/s                                                |                             |
|                                         | Scanning speed (S/DIV)        | 0.05us/DIV - 0.1s/DIV,step by 1 - 2 - 5                |                             |
|                                         | Trimming Ratio                | ≥2.5:1                                                 |                             |
| Vertical system                         | Sensitivity                   | 5 mV/DIV~ 10 V/DIV                                     |                             |
|                                         | Displacement                  | ±10DIV                                                 |                             |
|                                         | Low Frequency                 | ≥10 Hz (at input, AC coupling, -3 dB)                  |                             |
|                                         | Rise time (at input, Typical) | ≤30 ns                                                 |                             |
|                                         | Trimming Ratio                | ≥2.5:1                                                 |                             |
| Input coupling                          |                               | DC, AC , Ground                                        |                             |
| Input impedance                         |                               | 1 MΩ±2%, in parallel with 20 pF±5 pF                   |                             |
| Max. input voltage                      |                               | 400V (DC+AC, PK - PK)                                  |                             |
| X-Y Model                               |                               |                                                        |                             |
| Sensitivity                             |                               | X:0.5V/DIV Y:0.1V/DIV - 1V/DIV                         |                             |
| Bandwidth(-3dB)                         |                               | DC: 0 - 1MHz AC: 10Hz - 1MHz                           |                             |
| Trigger                                 |                               |                                                        |                             |
| Trigger level range                     |                               | ±4 DIV from the screen center                          |                             |
| Trigger level Accuracy (typical)        |                               | ±0.3 DIV                                               |                             |
| Trigger Sources                         |                               | Int, Line, Ext                                         |                             |
| Trigger Mode                            |                               | Norm, AUTO, TV                                         |                             |
| Edge trigger                            |                               | Rising, Falling                                        |                             |
| Video Trigger                           |                               | Support standard NTSC, PAL and SECAM broadcast systems |                             |
| Sample Rate / Relay Time                |                               | ±100ppm                                                |                             |
| Trigger lock                            |                               | support                                                |                             |
| Ext. Trigger Input Impedance            |                               | 1 MΩ2%, in parallel with 20 pF±5 pF                    |                             |
| Ext. Trigger Max. Input Voltage         |                               | 400Vpp                                                 |                             |
| Trigger Output of the probe compensator |                               |                                                        |                             |
| Output Voltage (Typical)                |                               | Square, 0.5Vpp±2%                                      |                             |
| Frequency (Typical)                     |                               | Square wave of 1 kHz(±1%)                              |                             |
| Display                                 |                               | 3.7" Colored LCD (Liquid Crystal Display)              |                             |
| Power Supply                            |                               | 100V - 240V AC, 50/60Hz, CAT II                        |                             |
| Power Consumption                       |                               | < 5W                                                   |                             |
| Fuse                                    |                               | 1A, T class, 250V                                      |                             |
| Dimension (W x H x D)                   |                               | 117 x 192 x 288 mm                                     |                             |
| Device Weight                           |                               | About 1.8 kg                                           |                             |

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.



Power Cord



Quick Guide



Probe



Probe Adjust

VDS6000 Series PC Oscilloscope



- + Dual-channel, ultra-thin body design
- + 100MHz bandwidth, and max. 1GSa/s real-time sampling rate
- + Standard built-in 5MHz signal generator
- + 8-bit, 12-bit, 14-bit vertical resolution, more accurate measurement
- + Max. 10M record length
- + Standard SCPI protocol supported, LabVIEW supported
- + Secondary development supported on Windows, Linux, Android, and iOS platform
- + Support Wi-Fi Communication

| Model                           | VDS6102                                                                                                                                                        | VDS6102A       |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Bandwidth                       | 100MHz                                                                                                                                                         |                |
| Channel                         | 2Channel+Signal generator                                                                                                                                      |                |
| Sample Rate                     | 1GS/s                                                                                                                                                          |                |
| Horizontal Scale (s/div)        | 2ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                          |                |
| Record Length                   | 10M                                                                                                                                                            |                |
| Input Impedance                 | 1MΩ ± 2%, in parallel with 10pF ± 5pF                                                                                                                          |                |
| Sample rate/Relay time accuracy | ±100ppm                                                                                                                                                        |                |
| Max Input Voltage               | 40V(DC + AC peak)                                                                                                                                              |                |
| Vertical Sensitivity            | 5mV/div - 5V/div                                                                                                                                               |                |
| Vertical Resolution             | 8 bits                                                                                                                                                         | 8 bits, 14bits |
| Trigger Type                    | Edge, Pulse, Video, Slope, and Alternate                                                                                                                       |                |
| Automatic Measurement           | Vpp, Vavg, Vrms, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, DelayA→B, DelayA→B |                |
| Waveform Math                   | +, -, *, /, FFT                                                                                                                                                |                |
| Communication Interface         | USB(Type-C), LAN, WIFI(optional)                                                                                                                               |                |
| Power Supply                    | ≤8W                                                                                                                                                            |                |
| Dimension (W x H x D)           | 190 × 18 × 120 (mm)                                                                                                                                            |                |
| Device Weight                   | 0.3 kg                                                                                                                                                         |                |

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.



Probe



Probe Adjust



USB Cable



Silicon Gel Case



CD Rom



WIFI (optional)



Adapter



Power Cord



Q9



Quick Guide



Bag(optional)



VDS Series PC Oscilloscope



- + Up to 100MHz bandwidth, and max 1GS/s real-time sample rate
- + Max 10M record length
- + Friendly UI : FFT, or X-Y, and waveform 2 views displayed on the same screen
- + Multi-trigger option : edge, video, slope, pulse, and alternate
- + USB isolation - less signal interference, more PC protection
- + USB bus powering, and LAN remote control (optional)
- + Ultra-thin body design, easy portability

| Model                    | VDS1022I                                                                                                                                                                                    | VDS1022            | VDS2062                                      | VDS2064        | VDS3104                               | VDS3102        |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------|----------------|---------------------------------------|----------------|
| Bandwidth                | 25MHz                                                                                                                                                                                       |                    | 60MHz                                        |                | 100MHz                                |                |
| Channel                  | 2Channel+Multi                                                                                                                                                                              |                    |                                              | 4Channel+Multi |                                       | 2Channel+Multi |
| Sample Rate              | 100MS/s                                                                                                                                                                                     |                    | 1GS/s                                        |                |                                       |                |
| Horizontal Scale (s/div) | 5ns/div - 100s/div, step by 1 - 2 - 5                                                                                                                                                       |                    |                                              |                | 2ns/div - 100s/div, step by 1 - 2 - 5 |                |
| Record Length            | 5K                                                                                                                                                                                          |                    | 10M                                          | 5M             |                                       | 10M            |
| Input Impedance          | 1MΩ ± 2%, in parallel with 10pF ± 5pF                                                                                                                                                       |                    |                                              |                |                                       |                |
| Max Input Voltage        | 400V(DC + AC peak)                                                                                                                                                                          | 40V (DC + AC peak) |                                              |                |                                       |                |
| Vertical Sensitivity     | 5mV/div - 5V/div                                                                                                                                                                            |                    |                                              |                |                                       |                |
| Vertical Resolution      | 8 bits                                                                                                                                                                                      |                    |                                              |                |                                       |                |
| Trigger Type             | Edge, Pulse, Video, Slope, and Alternate                                                                                                                                                    |                    |                                              |                |                                       |                |
| Automatic Measurement    | Vpp, Vavg, Vrms, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, DelayA→B $\frac{1}{2}$ , DelayA→B $\frac{1}{4}$ |                    |                                              |                |                                       |                |
| Waveform Math            | +, -, *, /, FFT                                                                                                                                                                             |                    |                                              |                |                                       |                |
| Communication Interface  | USB2.0 (isolation)                                                                                                                                                                          | USB2.0             | USB2.0; LANCommunication Interface(optional) |                |                                       |                |
| Power Supply             | ≤2.5W                                                                                                                                                                                       |                    | ≤6.5W                                        |                |                                       |                |
| Dimension (W x H x D)    | 170 × 18 × 120 (mm)                                                                                                                                                                         |                    | 190 × 18 × 120 (mm)                          |                |                                       |                |
| Device Weight            | 0.26 kg                                                                                                                                                                                     |                    |                                              |                | 0.3kg                                 |                |

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.



Probe



Probe Adjust



Power Cord\*



CD Rom



Quick Guide



USB Cable



Adapter\*



Silicon Gel Case



Soft Bag (optional)

\* Power cord and adapter only available for models with LAN port.

VDS2064 & VDS3104 Automotive Diagnostics Kits



|               |         |         |
|---------------|---------|---------|
| Model         | VDS2064 | VDS3104 |
| Bandwidth     | 60MHz   | 100MHz  |
| Channel       | 4       |         |
| Sample Rate   | 1GS/s   |         |
| Record Length | 5M      |         |

1. Support waveform record and replay function, and circle recording



2. Support 78 reference waveforms for automotive diagnostic



High-tension ignition pickup



BNC to 4 mm test lead



BNC plug to alligator clips cable



USB cable



Set of two large alligator clips



Set of two small alligator clips



Insulation piercing non-destructive test clip



20 : 1 Attenuator



Back-pinning probe set



CD



Portable carry case



HDS-N Series Dual Channel Handheld Oscilloscope



- + 2 in 1 (DSO + Multimeter)
- + Bandwidth : 20MHz - 200MHz
- + Sample Rate : 100MS/s - 1GS/s
- + With good ISOLATIONG between channels (HDS1022M-I)
- + Auto-scale function
- + Waveform record and replay
- + Multimeter newly supported SCPI



| Model                    | HDS1022M-I                                                                                                                                                       | HDS1022M-N | HDS2062M-N | HDS3102M-N | HDS4202M-N         |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|--------------------|
| Bandwidth                | 20MHz                                                                                                                                                            |            | 60MHz      | 100MHz     | 200MHz             |
| Channel                  | 2 Channel, isolation1000:1                                                                                                                                       |            | 2 Channel  |            |                    |
| Sample Rate              | 100MS/s                                                                                                                                                          | 500MS/s    | 1GS/s      |            |                    |
| Horizontal Scale (s/div) | 5ns/div - 100s/div                                                                                                                                               |            |            |            | 2ns/div - 100s/div |
| Display                  | 3.7" color TFT LCD, 640 x 480 pixels                                                                                                                             |            |            |            |                    |
| Record Length            | 6K points                                                                                                                                                        |            |            |            |                    |
| Input Impedance          | 1MΩ ± 2%                                                                                                                                                         |            |            |            |                    |
| Vertical Sensitivity     | 5mV/div - 5V/div(at input)                                                                                                                                       |            |            |            |                    |
| Trigger Type             | Edge, Video, and Alternate                                                                                                                                       |            |            |            |                    |
| Automatic Measurement    | Vpp, Vavg, Vrms, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, DelayA→B↕, DelayA→B↘ |            |            |            |                    |
| Waveform Math            | +,-,*,/, FFT                                                                                                                                                     |            |            |            |                    |
| Communication Interface  | USB                                                                                                                                                              |            |            |            |                    |
| Battery                  | 7.4V, 6 hours' operation                                                                                                                                         |            |            |            |                    |
| Dimension (W x H x D)    | 180 × 113 × 40 (mm)                                                                                                                                              |            |            |            |                    |
| Device Weight            | 645g                                                                                                                                                             |            |            |            |                    |

+ Multimeter Specifications

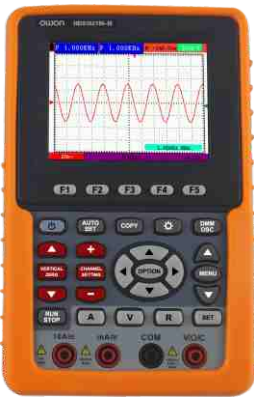
| Display                                               | Voltage                              | Current                            | Impedance          | Diode | On / Off Test |
|-------------------------------------------------------|--------------------------------------|------------------------------------|--------------------|-------|---------------|
| 3 <sup>3</sup> / <sub>4</sub> digits (max 4000 count) | DCV: 400mV - 1000V<br>ACV: 4V - 750V | DCA: 40mA - 10A<br>ACA: 40mV - 10A | 400Ω<br>4KΩ - 40MΩ | √     | √             |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



HDS Series Single Channel Handheld Oscilloscope



- + 2 in 1 (DSO + Multimeter)
- + Bandwidth : 20MHz - 100MHz
- + Sample Rate : 500MS/s - 1GS/s
- + Auto-scale function
- + 20 group automatic measurement options
- + Waveform record and replay
- + Multimeter newly supported SCPI



| Model                    | HDS1021M-N                                                                                                                                                       | HDS2061M-N                            | HDS3101M-N |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------|
| Bandwidth                | 20MHz                                                                                                                                                            | 60MHz                                 | 100MHz     |
| Channel                  | 1 Channel                                                                                                                                                        |                                       |            |
| Sample Rate              | 500MS/s                                                                                                                                                          | 500MS/s                               | 1GS/s      |
| Horizontal Scale (s/div) | 5ns/div - 100s/div                                                                                                                                               |                                       |            |
| Display                  | 3.7" color TFT LCD, 640 x 480 pixels                                                                                                                             |                                       |            |
| Record Length            | 24K                                                                                                                                                              |                                       |            |
| Input Impedance          | 1MΩ ± 2%, in parallel with 20pF ± 5pF                                                                                                                            | 1MΩ ± 2%, in parallel with 15pF ± 5pF |            |
| Vertical Sensitivity     | 5mV/div - 5V/div(at input)                                                                                                                                       |                                       |            |
| Trigger Type             | Edge, Video                                                                                                                                                      |                                       |            |
| Automatic Measurement    | Vpp, Vavg, Vrms, Frequency, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, DelayA→B↕, DelayA→B↴ |                                       |            |
| Communication Interface  | USB                                                                                                                                                              |                                       |            |
| Li-ion Battery           | 7.4V, 6 hours' operation                                                                                                                                         |                                       |            |
| Dimension (W x H x D)    | 180 × 113 × 40 (mm)                                                                                                                                              |                                       |            |
| Device Weight            | 645g                                                                                                                                                             |                                       |            |

+ Multimeter Specifications

| Display                                               | Voltage                              | Current                            | Impedance          | Diode | On / Off Test |
|-------------------------------------------------------|--------------------------------------|------------------------------------|--------------------|-------|---------------|
| 3 <sup>3</sup> / <sub>4</sub> digits (max 4000 count) | DCV: 400mV - 1000V<br>ACV: 4V - 750V | DCA: 40mA - 10A<br>ACA: 40mV - 10A | 400Ω<br>4KΩ - 40MΩ | √     | √             |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



# XSA1000 Series Spectrum Analyzer

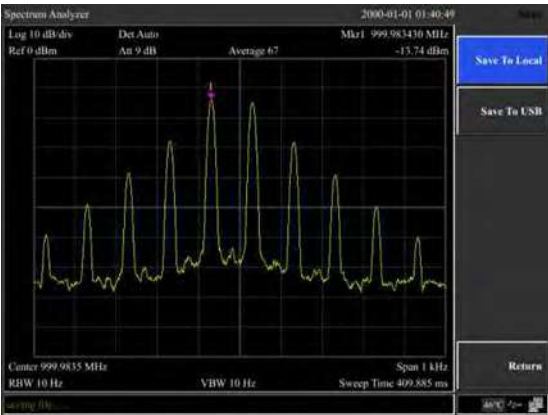
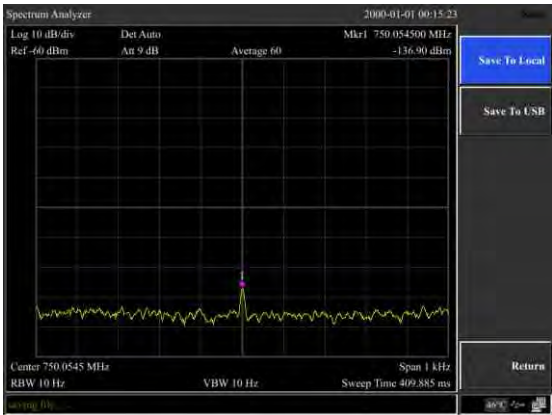


- + Frequency Range 9kHz-7.5GHz
- + -160dBm Displayed Average Noise Level
- + Phase Noise -82dBc/Hz @1Gz and offset at 10kHz
- + Total Amplitude Accuracy <1.5dB
- + 10Hz Minimum Resolution Bandwidth (RBW)
- + EMI Pre-compliance Test Kit
- + 10.4 inches display



## 1. 10 Hz Minimum Resolution Bandwidth (RBW)

Digital IF technology offers a minimum bandwidth of 10Hz, allowing excellent signal resolution when separation of closely spaced signals is required.

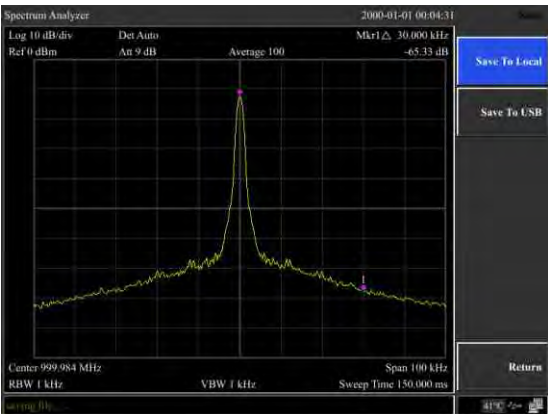
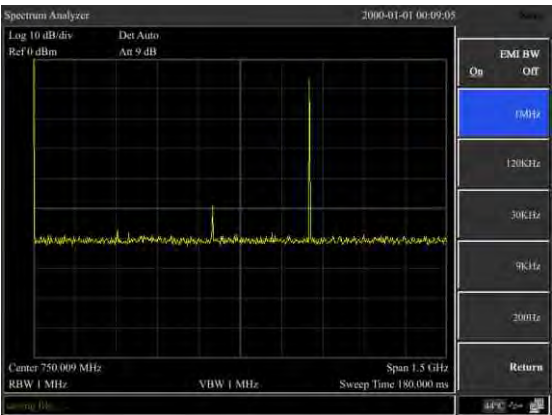


## 2. Measure -130dB small signal at 10Hz RBW

Offers a DANL (displayed average noise level) down to -130 dBm, which is able to measure smaller signals.

## 3. Phase noise: < -80 dBc/Hz @ 1 GHz @ 30 KHz offset

Excellent phase noise performance - < -80dBc/Hz @30KHz enables users to evaluate most synthesizers and signal generators.



## 4. EMI filter and peak detector kit

OWON offers an EMI filter and peak detector kit to help evaluating EMI levels for pre-compliance testing.

| Model                                        | XSA1015(TG)                                                                                                              | XSA1036(TG)                                                                     | XSA1075(TG)                                                                     |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Frequency Range                              | 9kHz-1.5 GHz                                                                                                             | 9kHz-3.6 GHz                                                                    | 9kHz-7.5GHz                                                                     |
| Frequency Resolution                         | 1Hz                                                                                                                      |                                                                                 |                                                                                 |
| Aging rate                                   | <1ppm/Year                                                                                                               |                                                                                 | <1ppm/Year                                                                      |
| Phase Noise (fc=1GHz)                        | < -82 dBc/Hz @10 kHz offset                                                                                              |                                                                                 | < -98 dBc/Hz @10 kHz offset                                                     |
| Resolution Bandwidth (-3dB) (RBW)            | 10 Hz to 500 kHz (1-10 steps by sequence), 1 MHz, 3 MHz                                                                  |                                                                                 |                                                                                 |
| Video Bandwidth(-3dB)(VBW)                   | 10Hz tp 3MHz                                                                                                             |                                                                                 |                                                                                 |
| Display Average Noise Level (DANL)           | (Input Attenuation= 0 dB, Sample Detector, Trace Average ≥20, 20°C to 30°C, Input Impedance=50 Ω, RBW normalizes to 1Hz) |                                                                                 |                                                                                 |
| 1MHz - 10MHz                                 | -160dBm (Typical)                                                                                                        |                                                                                 |                                                                                 |
| 10MHz - 1GHz                                 | -160dBm (Typical)                                                                                                        |                                                                                 |                                                                                 |
| 1GHz - 1.5GHz                                | -158dBm (Typical)                                                                                                        |                                                                                 |                                                                                 |
| 1GHz - 3.6GHz                                |                                                                                                                          | -158dBm (Typical)                                                               | -158dBm (Typical)<br>(1GHz-3GHz)                                                |
| 3GHz - 4 GHz                                 |                                                                                                                          |                                                                                 | -157 dBm (Typical)                                                              |
| 4GHz - 7.5GHz                                |                                                                                                                          |                                                                                 | -152 dBm (Typical)                                                              |
| Detectors                                    | Positive-peak, negative-peak, sample, normal, RMS                                                                        |                                                                                 |                                                                                 |
| Trace functions                              | Clear write, Max Hold, Min Hold, View, Blank, Average                                                                    |                                                                                 |                                                                                 |
| level unit                                   | dBm,dBuW,dBpW,dBmV,dBuV, W,V                                                                                             |                                                                                 |                                                                                 |
| Tracking generator (-TG Model)               | 100 kHz-1.5 GHz                                                                                                          | 100 kHz-3.6 Ghz<br>(Tracking generator)<br>35 MHz-3.6 Ghz<br>(signal generator) | 100 kHz-7.5 Ghz<br>(Tracking generator)<br>35 MHz-4.4 Ghz<br>(signal generator) |
| Output power level range<br>(-TG Model)      | -30 dBm-0 dBm                                                                                                            |                                                                                 |                                                                                 |
| Output power level resolution<br>(-TG Model) | 1dB                                                                                                                      |                                                                                 |                                                                                 |
| Communication Port                           | USB HOST, USB DEVICE, LAN, earphone port, VGA, REF                                                                       |                                                                                 |                                                                                 |
| Display                                      | 10.4 inch TFT LCD                                                                                                        |                                                                                 |                                                                                 |

Specifications subject to change without prior notice.

## + Accessories

The accessories subject to final delivery.



Power Cord



USB Cable



CD-Rom



Quick Guide

## Optional Accessories



N-N Cable



N-SMA Cable



SMA-SMA Cable



SMA Adaptor



N-SMA Adaptor

Near Field Probe includes:  
Four near-field probes,  
N-SMA adapter,  
SMA-SMAcable,  
( Frequency range: 30MHz - 3GHz)



HSA1000 Series Handheld Spectrum Analyzer



- + Frequency Range from 9 kHz up to 3.6 GHz
- + -160dBm Displayed Average Noise Level
- + Phase Noise -80dBc/Hz @1Gz and offset at 10kHz
- + Total Amplitude Accuracy <1.5dB
- + 10Hz Minimum Resolution Bandwidth (RBW)
- + Standard GPS receiver, optional antenna, the latitude/longitude information and test information can be recorded
- + Li-ion battery, operating life up to 4 hours, easy replacement, you can purchase extra batteries for longer test time.
- + 8-inch (1024\*768) IPS LCD touchscreen, built-in light sensor to adjust the screen backlight according to the environmental light.



Provide EMC test function (requires optional software)

Built-in more than 200 mainstream EMC test standards and regulations templates. The user selects the corresponding template, and the software automatically sets the spectrum analyzer and records the test data. The data and regulations can be compared on the same screen. Users can also customize regulations for comparative analysis.



With a Carrying case (optional), you can free your hands and make on-site work more convenient.



Pass/Fail function  
Quickly determine if the test results pass



Provides EMI pre-compliance test function

Equipped with EMI filter (6dB) and peak detector as standard, it is more accurate for EMI pre-test and diagnosis, and complete testing and production report can be completed by using supporting software.

| Model                                     | HSA1016(TG)                                                                                                              | HSA1036(TG)                                                               |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Frequency Range                           | 9kHz-1.6 GHz                                                                                                             | 9kHz-3.6 GHz                                                              |
| Frequency Resolution                      | 1Hz                                                                                                                      |                                                                           |
| Aging rate                                | <1ppm/Year                                                                                                               |                                                                           |
| Phase Noise (fc=1GHz)                     | <-80 dBc/Hz @10 kHz offset                                                                                               |                                                                           |
| Resolution Bandwidth (-3dB) (RBW)         | 10 Hz to 500 kHz (1-10 steps by sequence), 1 MHz, 3 MHz                                                                  |                                                                           |
| Video Bandwidth(-3dB)(VBW)                | 10Hz tp 3MHz                                                                                                             |                                                                           |
| Display Average Noise Level (DANL)        | (Input Attenuation= 0 dB, Sample Detector, Trace Average ≥20, 20°C to 30°C, Input Impedance=50 Ω, RBW normalizes to 1Hz) |                                                                           |
| 1MHz-10MHz                                | -160dBm (Typical)                                                                                                        |                                                                           |
| 10MHz-1GHz                                | -160dBm (Typical)                                                                                                        |                                                                           |
| 1GHz-1.5GHz                               | -158dBm (Typical)                                                                                                        |                                                                           |
| 1GHz-3.6GHz                               |                                                                                                                          | -158dBm (Typical)                                                         |
| Detectors                                 | Positive-peak, negative-peak, sample, normal, RMS                                                                        |                                                                           |
| Trace functions                           | Clear write, Max Hold, Min Hold, View, Blank, Average                                                                    |                                                                           |
| level unit                                | dBm,dBuW,dBpW,dBmV,dBuV, W,V                                                                                             |                                                                           |
| Tracking generator (-TG Model)            | 100 kHz-1.6 GHz                                                                                                          | 100 kHz-3.6 GHz (Tracking generator)<br>35 MHz-3.6 GHz (signal generator) |
| Output power level range (-TG Model)      | -30 dBm-0 dBm                                                                                                            |                                                                           |
| Output power level resolution (-TG Model) | 1dB                                                                                                                      |                                                                           |
| Communication Port                        | USB HOST, USB DEVICE, LAN, earphone port                                                                                 |                                                                           |
| Display                                   | 8 inch touch LCD                                                                                                         |                                                                           |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Power Cord



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Adapter



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Metal Case



GPS antenna



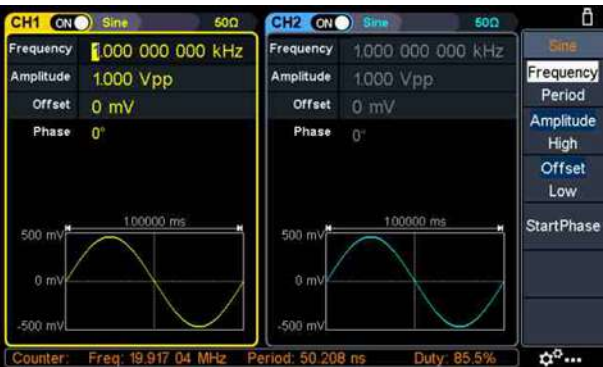
Soft Bag (optional)

XDG2000 Series Dual-channel Arbitrary Waveform Generator

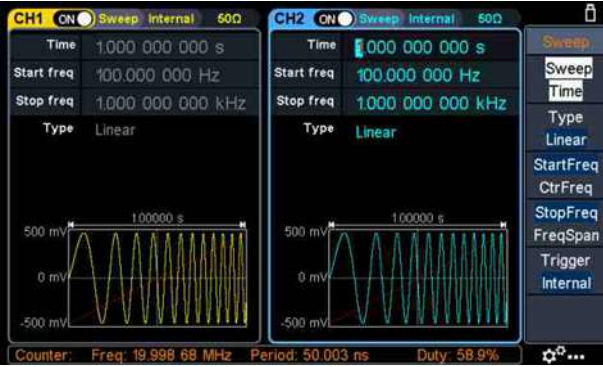


- + Max 100MHz frequency output
- + 500MSa/s Sample rate, Vertical resolution 1μHz
- + 14 bits Vertical Resolution, 10Marb waveform length
- + Comprehensive waveform output : 6 basic waveforms, and 150 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, DSB-AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, 3FSK, 4FSK, OSK, PWM and SUM
- + High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
- + SCPI, and LabVIEW supported
- + 7 inch (800 × 480 pixels) LCD

Equal performance dual channel output



Rich sweep function



Rich analog and digital modulation



Build-in 152 arbitrary waveforms



| Model                       | XDG2100                                                                                                                                | XDG2080     | XDG2060     | XDG2035       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|---------------|
| Channel                     | 2                                                                                                                                      |             |             |               |
| Frequency Output            | 100MHz                                                                                                                                 | 80MHz       | 60MHz       | 35MHz         |
| Sample Rate                 | 500MSa/s                                                                                                                               |             |             |               |
| Vertical Resolution         | 14 bits                                                                                                                                |             |             |               |
| Waveform                    |                                                                                                                                        |             |             |               |
| Standard Waveform           | sine, square, pulse, ramp, noise, and harmonic                                                                                         |             |             |               |
| Arbitrary Waveform          | exponential rise, exponential fall, sin(x)/x, step wave, and others, total 150 built-in waveforms, and user-defined arbitrary waveform |             |             |               |
| Frequency (resolution 1μHz) |                                                                                                                                        |             |             |               |
| Sine                        | 1μz - 100MHz                                                                                                                           | 1μz - 80MHz | 1μz - 60MHz | 1μz - 35MHz   |
| Square                      | 1μz - 30MHz                                                                                                                            | 1μz - 30MHz | 1μz - 30MHz | 1μz - 15MHz   |
| Pulse                       | 1μz - 25MHz                                                                                                                            | 1μz - 25MHz | 1μz - 25MHz | 1μz - 15MHz   |
| Ramp                        | 1μz - 3MHz                                                                                                                             | 1μz - 3MHz  | 1μz - 3MHz  | 1μz - 3MHz    |
| Noise (-3dB, typical)       | 100MHz                                                                                                                                 | 80MHz       | 60MHz       | 30MHz         |
| Arbitrary Waveform          | 1μz - 15MHz                                                                                                                            | 1μz - 15MHz | 1μz - 15MHz | 1μz - 15MHz   |
| Harmonic                    | 1μz - 50MHz                                                                                                                            | 1μz - 40MHz | 1μz - 30MHz | 1μz - 17.5MHz |
| Accuracy                    | ±1ppm, 25°C±5°C                                                                                                                        |             |             |               |
| Waveform Length             | 2 points - 10M points                                                                                                                  |             |             |               |
| Amplitude                   |                                                                                                                                        |             |             |               |
| into 50Ω load               | 1mVpp - 10Vpp (≤ 25MHz), 1mVpp - 5Vpp (≤60MHz), 1mVpp - 2.5Vpp (≤100MHz)                                                               |             |             |               |
| Modulation                  |                                                                                                                                        |             |             |               |
| Type                        | AM, DSB-AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, 3FSK, 4FSK, OSK, PWM, SUM                                                               |             |             |               |
| Frequency Counter           |                                                                                                                                        |             |             |               |
| Function                    | Frequency, period, +width, -width, +duty, and -duty                                                                                    |             |             |               |
| Frequency Range             | 100mHz - 200MHz                                                                                                                        |             |             |               |
| Frequency Resolution        | 7 digits                                                                                                                               |             |             |               |
| Input / Output              |                                                                                                                                        |             |             |               |
| Input mode                  | frequency counter, external modulation input, external trigger input, Internal clock output, external reference clock input / output   |             |             |               |
| Communication Interface     | USB Host, USB Device,LAN, RS232 (optional)                                                                                             |             |             |               |
| Mechanical specifications   |                                                                                                                                        |             |             |               |
| Size                        | 340mm x 177mm x 90mm                                                                                                                   |             |             |               |
| Weight                      | 2.3kg                                                                                                                                  |             |             |               |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Q9 Cable



## XDG3000 Series Dual-channel Arbitrary Waveform Generator



- + Advanced DDS technology, Max 250MHz frequency output
- + Max 1.25GS/s sample rate, and 1μHz frequency resolution
- + Vertical Resolution :14 bits, max 1M arb waveform length
- + Comprehensive waveform output : 6 basic waveforms, and 152 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, FM, PM, FSK, 3FSK, 4FSK, PSK, OSK, ASK, BPSK, PWM, Sweep, and Burst
- + High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
- + SCPI, and LabVIEW supported
- + 8 inch (800 x 600) high resolution LCD, multi-point touch screen, more user-friendly operation experience



### Equal performance dual channel output



### Rich sweep function



### Rich analog and digital modulation



### Build-in 152 arbitrary waveforms



| Model                       | XDG3252                                                                                                                                | XDG3202       | XDG3162       | XDG3102       | XDG3082      |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|--------------|
| Channel                     | dual                                                                                                                                   |               |               |               |              |
| Frequency Output            | 250MHz                                                                                                                                 | 200MHz        | 160MHz        | 100MHz        | 80MHz        |
| Sample Rate                 | 1.25GSa/s                                                                                                                              |               |               |               |              |
| Vertical Resolution         | 14 bits                                                                                                                                |               |               |               |              |
| Waveform                    |                                                                                                                                        |               |               |               |              |
| Standard Waveform           | Sine, Square, Pulse, Ramp, Noise, and Harmonic                                                                                         |               |               |               |              |
| Arbitrary Waveform          | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 152 built-in waveforms, and user-defined arbitrary waveform |               |               |               |              |
| Frequency (resolution 1μHz) |                                                                                                                                        |               |               |               |              |
| Sine                        | 1μHz - 250MHz                                                                                                                          | 1μHz - 200MHz | 1μHz - 160MHz | 1μHz - 100MHz | 1μHz - 80MHz |
| Square                      | 1μHz - 50MHz                                                                                                                           |               |               | 1μHz - 40MHz  | 1μHz - 30MHz |
| Pulse                       | 1μHz - 25MHz                                                                                                                           |               |               |               |              |
| Ramp                        | 1μHz - 5MHz                                                                                                                            |               |               |               |              |
| Harmonic                    | 1μHz - 250MHz                                                                                                                          | 1μHz - 200MHz | 1μHz - 160MHz | 1μHz - 100MHz | 1μHz - 80MHz |
| Noise                       | 120MHz (-3dB, type)                                                                                                                    |               |               |               |              |
| Wave Length                 | 2 - 1M pts                                                                                                                             |               |               |               |              |
| Amplitude                   |                                                                                                                                        |               |               |               |              |
| Amplitude (50Ω)             | 2mVpp - 20Vpp (≤ 40MHz), 2mVpp - 10Vpp (≤80MHz)<br>2mVpp - 5Vpp (≤120MHz), 2mVpp - 2Vpp (≤200MHz)                                      |               |               |               |              |
| Modulation                  |                                                                                                                                        |               |               |               |              |
| Type                        | AM, FM, PM, PWM, FSK, 3FSK, 4FSK, PSK, OSK, ASK, BPSK, Sweep, and Burst                                                                |               |               |               |              |
| Frequency Counter           |                                                                                                                                        |               |               |               |              |
| Function                    | Frequency, Period, +Width, -Width, +Duty, and -Duty                                                                                    |               |               |               |              |
| Frequency Range             | 100mHz - 200MHz                                                                                                                        |               |               |               |              |
| Frequency Resolution        | 7 digits/s                                                                                                                             |               |               |               |              |
| Input / Output              |                                                                                                                                        |               |               |               |              |
| Type                        | counter, external modulation input, external trigger input, external reference clock input / output                                    |               |               |               |              |
| Communication Interface     | USB Host, USB Device, LAN                                                                                                              |               |               |               |              |
| Mechanical                  |                                                                                                                                        |               |               |               |              |
| Dimension (W x H x D)       | 340 x 177 x 90 (mm)                                                                                                                    |               |               |               |              |
| Device Weight               | 2.50 kg                                                                                                                                |               |               |               |              |

Specifications subject to change without prior notice.

### + Accessories

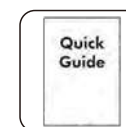
The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Q9 Cable

AG-S Series Single-channel Arbitrary Waveform Generator



- + Advanced DDS technology, upto 10MHz frequency output
- + 400MS/s sample rate, and 1μHz frequency resolution
- + Vertical Resolution : 14 bits, and 8K arb waveform length
- + Comprehensive waveform output : 5 basic waveforms, and 45 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, FM, PM, FSK, Sweep, and Burst
- + SCPI, and LabVIEW supported
- + 4" high resolution (480 x 320 pixels) LCD
- + could work with OWON SDS Series DSO smoothly

| Model               | AG051            | AG051F | AG1011 | AG1011F |
|---------------------|------------------|--------|--------|---------|
| Channel             | single + trigger |        |        |         |
| Frequency Output    | 5MHz             |        | 10MHz  |         |
| Sample Rate         | 125MS/s          |        |        |         |
| Vertical Resolution | 14 bits          |        |        |         |

Waveform

|                    |                                                                                                                                       |  |  |  |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Standard Waveform  | Sine, Square, Pulse, Ramp, Noise                                                                                                      |  |  |  |
| Arbitrary Waveform | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform |  |  |  |

Frequency (resolution 1μHz)

|             |                 |              |
|-------------|-----------------|--------------|
| Sine        | 1μHz - 5MHz     | 1μHz - 10MHz |
| Square      | 1μHz - 5MHz     |              |
| Pulse       | 1μHz - 5MHz     |              |
| Ramp        | 1μHz - 1MHz     |              |
| Noise       | 5MHz(-3dB,type) |              |
| Wave Length | 2 - 8K pts      |              |

Amplitude

|           |                                                     |  |  |  |
|-----------|-----------------------------------------------------|--|--|--|
| Amplitude | 1mVpp-12.5 Vpp (50Ω), 1mVpp-25 Vpp (high impedance) |  |  |  |
|-----------|-----------------------------------------------------|--|--|--|

Modulation (optional)

|                      |   |                                      |   |                                      |
|----------------------|---|--------------------------------------|---|--------------------------------------|
| Modulation Waveform  | / | AM, FM, PM, FSK, Sweep, Burst        | / | AM, FM, PM, FSK, Sweep, Burst        |
| Modulation Frequency | / | 2mHz to 20.00KHz (FSK 2mHz - 100KHz) | / | 2mHz to 20.00KHz (FSK 2mHz - 100KHz) |

Counter Specification (optional)

|                 |                                                     |  |  |  |
|-----------------|-----------------------------------------------------|--|--|--|
| Function        | Frequency, period, positive Pulse width, Duty cycle |  |  |  |
| Frequency Range | Single channel: 100 mHz - 200 MHZ                   |  |  |  |

Input / Output

|                         |                                |                                                                                   |                                |                                                                                   |
|-------------------------|--------------------------------|-----------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------|
| Type                    | external reference clock input | external modulation input, external trigger input, external reference clock input | external reference clock input | external modulation input, external trigger input, external reference clock input |
| Communication Interface | USB device                     |                                                                                   |                                |                                                                                   |

| Model               | AG4081           | AG4101 | AG4121 | AG4151 |
|---------------------|------------------|--------|--------|--------|
| Channel             | single + trigger |        |        |        |
| Frequency Output    | 80MHz            | 100MHz | 120MHz | 150MHz |
| Sample Rate         | 400MS/s          |        |        |        |
| Vertical Resolution | 14 bits          |        |        |        |

Waveform

|                    |                                                                                                                                       |  |  |  |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Arbitrary Waveform | Sine, Square, Pulse, Ramp, Noise                                                                                                      |  |  |  |
| Arbitrary Waveform | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform |  |  |  |

Frequency (resolution 1μHz)

|             |                  |               |               |               |
|-------------|------------------|---------------|---------------|---------------|
| Sine        | 1μHz - 80MHz     | 1μHz - 100MHz | 1μHz - 120MHz | 1μHz - 150MHz |
| Square      | 1μHz - 40MHz     | 1μHz - 50MHz  |               |               |
| Pulse       | 1μHz - 20MHz     | 1μHz - 25MHz  |               |               |
| Ramp        | 1μHz - 1MHz      |               |               |               |
| Noise       | 50MHz(-3dB,type) |               |               |               |
| Wave Length | 2 - 1M pts       |               |               |               |

Amplitude

|           |                                                    |  |  |  |
|-----------|----------------------------------------------------|--|--|--|
| Amplitude | 10mVpp-10 Vpp (50Ω),10mVpp-20 Vpp (high impedance) |  |  |  |
|-----------|----------------------------------------------------|--|--|--|

Modulation (optional)

|                      |                                      |  |  |  |
|----------------------|--------------------------------------|--|--|--|
| Modulation Waveform  | AM, FM, PM, FSK, PWM, Sweep, Burst   |  |  |  |
| Modulation Frequency | 2mHz to 20.00KHz (FSK 2mHz - 100KHz) |  |  |  |

Input / Output

|                         |                                                                                                     |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------------------------|--|--|--|
| Type                    | external modulation input, external trigger input / output, external reference clock input / output |  |  |  |
| Communication Interface | USB host, USB device, LAN, RS232 (optional)                                                         |  |  |  |

Mechanical

|                       |                      |  |  |  |
|-----------------------|----------------------|--|--|--|
| Dimension (W x H x D) | 235 × 110 × 295 (mm) |  |  |  |
| Device Weight         | 3kg                  |  |  |  |

Specifications subject to change without prior notice.

+ Accessories      The accessories subject to final delivery.



Power Cord



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USB Cable



Q9 Cable



AG Series Dual-Channel Arbitrary Waveform Generator



- + Advanced DDS technology, max 60MHz frequency output
- + Up to 300MS/s sample rate, and 1μHz frequency resolution
- + Vertical Resolution : 14 bits, up to 1M arb waveform length
- + Comprehensive waveform output : 5 basic waveforms, and 45 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, FM, PM, FSK, PWM, Sweep, and Burst
- + High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
- + SCPI, and LabVIEW supported
- + 4 inch high resolution (480 x 320 pixels) LCD
- + could work with OWON SDS Series DSO smoothly

| Model                             | AG1012                                                                                                                                | AG1012F                              | AG1022 | AG1022F           | AG2052F                            | AG2062F      |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------|-------------------|------------------------------------|--------------|
| Channel                           | dual                                                                                                                                  |                                      |        |                   |                                    |              |
| Frequency Output                  | 10MHz                                                                                                                                 | 25MHz                                |        |                   | 50MHz                              | 60MHz        |
| Sample Rate                       | 125MS/s                                                                                                                               |                                      |        |                   | 300MS/s                            |              |
| Vertical Resolution               | 14 bits                                                                                                                               |                                      |        |                   |                                    |              |
| Waveform                          |                                                                                                                                       |                                      |        |                   |                                    |              |
| Standard Waveform                 | Sine, Square, Pulse, Ramp, Noise                                                                                                      |                                      |        |                   |                                    |              |
| Arbitrary Waveform                | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform |                                      |        |                   |                                    |              |
| Frequency (resolution 1μHz)       |                                                                                                                                       |                                      |        |                   |                                    |              |
| Sine                              | 1μHz - 10MHz                                                                                                                          | 1μHz - 25MHz                         |        |                   | 1μHz - 50MHz                       | 1μHz - 60MHz |
| Square                            | 1μHz - 5MHz                                                                                                                           | 1μHz - 5MHz                          |        |                   | 1μHz - 25MHz                       | 1μHz - 30MHz |
| Pulse                             | 1μHz - 5MHz                                                                                                                           | 1μHz - 5MHz                          |        |                   | 1μHz - 10MHz                       | 1μHz - 15MHz |
| Ramp                              | 1μHz - 1MHz                                                                                                                           |                                      |        |                   |                                    |              |
| Noise                             | 25MHz (-3dB, type)                                                                                                                    |                                      |        |                   |                                    |              |
| Wave Length                       | 2 - 8K pts                                                                                                                            |                                      |        |                   | 2 - 1M pts                         |              |
| Amplitude                         |                                                                                                                                       |                                      |        |                   |                                    |              |
| Amplitude                         | 1 mVpp - 10 Vpp (50Ω), 1 mVpp - 20 Vpp (high impedance)                                                                               |                                      |        |                   |                                    |              |
| Modulation                        |                                                                                                                                       |                                      |        |                   |                                    |              |
| Modulation Waveform               | /                                                                                                                                     | AM, FM, PM, FSK, Sweep, Burst        |        |                   | AM, FM, PM, FSK, PWM, Sweep, Burst |              |
| Modulation Frequency              | /                                                                                                                                     | 2mHz to 20.00KHz (FSK 2mHz - 100KHz) |        |                   |                                    |              |
| Mechanical                        |                                                                                                                                       |                                      |        |                   |                                    |              |
| Dimension (W x H x D)             | 235 × 110 × 295 (mm)                                                                                                                  |                                      |        |                   |                                    |              |
| Device Weight                     | 3kg                                                                                                                                   |                                      |        |                   |                                    |              |
| Power Amplifier Module (optional) |                                                                                                                                       |                                      |        |                   |                                    |              |
| Bandwidth (at full power)         | DC-100kHz                                                                                                                             | Max Output Power                     | 10W    | Max Input Voltage |                                    | 22Vpp        |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Power Cord



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USB Cable



Q9 Cable

XDM2041 Bench-type Digital Multimeter



- + 3.7 inch (480x320) high resolution LCD
- + 55,000 counts
- + Up to 65 readings per second
- + True RMS AC voltage / current measurement
- + Dual line display supported
- + Trend analysis accessible in chart mode
- + SCPI support

| Basic Function          | Measurement Range       | Optimal Accuracy |
|-------------------------|-------------------------|------------------|
| DC Voltage              | 50.000mV-1000.0V        | 0.025%+5         |
| True RMS AC Voltage     | 500mv-750v              | 0.5%+30          |
| AC Voltage              | 500uA/5000uA/50mA/500mA | 0.15%+20         |
|                         | 5A/10A                  | 0.5%+10          |
| True RMS AC Current     | 500uA-500mA             | 0.5%+20          |
|                         | 5A-10A                  | 1.5%+20          |
| Resistance              | 500Ω                    | 0.1%+10          |
|                         | 5KΩ/50KΩ/500KΩ          | 0.1%+5           |
|                         | 5MΩ                     | 0.25%+5          |
|                         | 50MΩ                    | 1%+10            |
| Four-wire resistance    | 500Ω                    | 0.1%+10          |
|                         | 5KΩ/50KΩ                | 0.1%+5           |
| Diode                   | 3.0000 V                |                  |
| Continuity              | 1000 Ω                  |                  |
| Frequency               | 10.000Hz-60MHz          | ±(0.2%+8)        |
| Capacitance             | 50nF-500uF              | 2.5%+5           |
|                         | 5mF-50mF                | 5%+8             |
| Temperature             | K-type, T100            |                  |
| Display                 | 55,000                  |                  |
| Logging Duration        | 15ms-9999s              |                  |
| Logging Length          | 1,000pts                |                  |
| General                 |                         |                  |
| Communication Interface | RS232                   |                  |
| Dimensions (W×H×D)      | 235 x 110 x 295 (mm)    |                  |
| Device Weight           | Approximately 3kg       |                  |

Specifications subject to change without prior notice

+ Accessories The accessories subject to final delivery.



Power Cord



Quick Guide



Fuse



Multimeter Lead



Alligator Clip

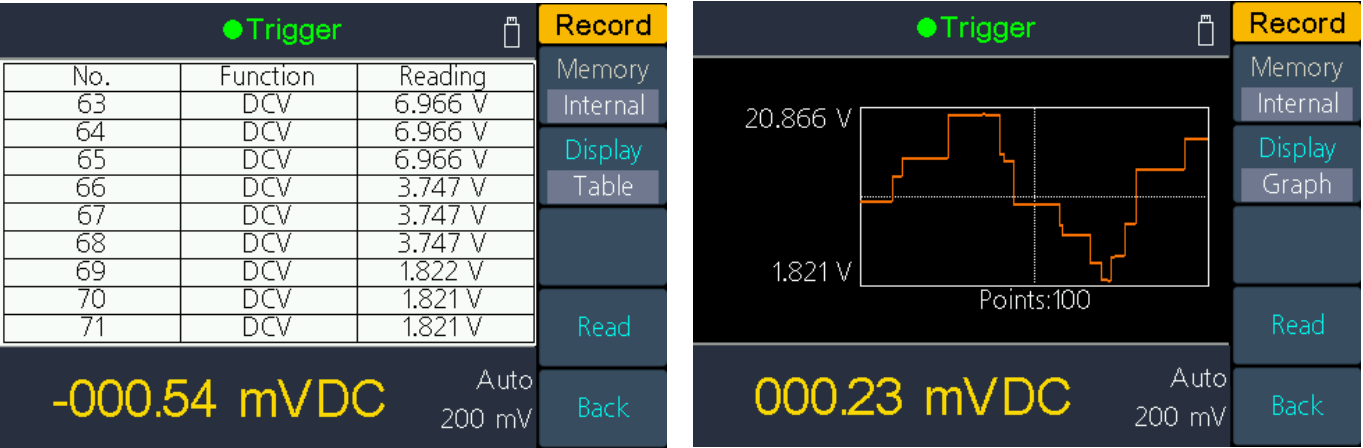
XDM3000 Series Bench-type Digital Multimeter



- + 4 inch 480 x 320 pixels high resolution LCD
- + 5 1/2 digits and 4 1/2 digits resolutions
- + reading rates up to 150 readings/s
- + true RMS AC voltage / current measurement
- + dual line display supported
- + the change trend analysis accessible via special chart mode
- + SCPI supported - remote control, and data-sharing possible via LAN, USB, RS232 port, and WiFi\*
- \* WiFi module is optional
- + multi- IO interface: USB Device / Host, RS232, LAN, and ext. trigger input

Data-logger Mode

during recording the measurement value, possible to set the logging duration (min. 5ms), and length, then get access to chart or table result



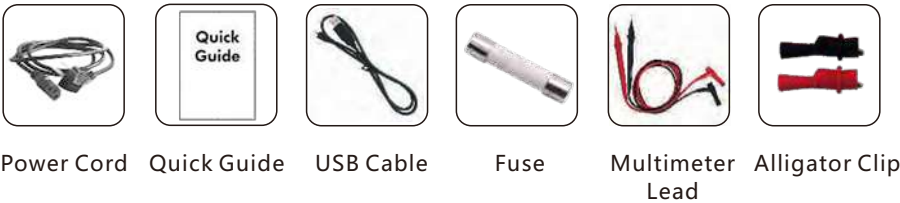
| Model               | XDM3051              |                  | XDM3041              |                  |
|---------------------|----------------------|------------------|----------------------|------------------|
| Function            | Measurement Range    | Optimal Accuracy | Measurement Range    | Optimal Accuracy |
| DC Voltage          | 200mV-1000V          | 0.015 ± 0.004    | 600mV-1000V          | 0.02 ± 0.01      |
| True RMS AC Voltage | 200mV-750V           | 0.2 + 0.05       | 600mV-750V           | 0.2 + 0.06       |
| DC Current          | 200.000 µA-10.0000 A | 0.055 + 0.005    | 600.000 µA-10.0000 A | 0.06 + 0.02      |
| True RMS AC Current | 20.0000 mA-10.0000 A | 0.50 + 0.10      | 60.000 mA-10.000 A   | 0.50 + 0.10      |
| Resistance          | 200.000 Ω            | 0.030 + 0.005    | 600.000 Ω            | 0.040 + 0.01     |
|                     | 2.00000 kΩ           | 0.020 + 0.003    | 6.00000 kΩ           | 0.030 + 0.01     |
|                     | 20.0000 kΩ           | 0.020 + 0.003    | 60.0000 kΩ           | 0.030 + 0.01     |
|                     | 200.000 kΩ           | 0.020 + 0.003    | 600.000 kΩ           | 0.040 + 0.01     |
|                     | 2.00000 MΩ           | 0.040 + 0.004    | 6.00000 MΩ           | 0.120 + 0.03     |
|                     | 10.0000 MΩ           | 0.250 + 0.003    | 60.0000 MΩ           | 0.90 + 0.03      |
|                     | 100.000 MΩ           | 1.75 + 0.004     | 600.000 MΩ           | 1.75 + 0.03      |

| Model                   | XDM3051                                                                                                                                                                                                    |                  | XDM3041                                        |                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------|------------------|
| Function                | Measurement Range                                                                                                                                                                                          | Optimal Accuracy | Measurement Range                              | Optimal Accuracy |
| Diode Test              | 2.0000V                                                                                                                                                                                                    | 0.05 ± 0.01      | 3.0000V                                        | 0.5 ± 0.01       |
| Continuity              | 2000Ω                                                                                                                                                                                                      | 0.05 ± 0.01      | 1000Ω                                          | 0.5 ± 0.01       |
| Frequency Period        | 20Hz - 1MHz                                                                                                                                                                                                | 0.01 + 0.003     | 20Hz - 1MHz                                    | 0.01 + 0.003     |
|                         | 20Hz - 10KHz                                                                                                                                                                                               | 0.01 + 0.003     | 20Hz - 10KHz                                   | 0.01 + 0.003     |
| Display                 | 240000                                                                                                                                                                                                     |                  | 66000                                          |                  |
| Test Current            |                                                                                                                                                                                                            |                  |                                                |                  |
| Capacitance             | Measurement Range                                                                                                                                                                                          | Test Current     | Accuracy: 1 Year ± (% of reading + % of range) |                  |
|                         | 2.000 nF                                                                                                                                                                                                   | 200 nA           | 3 + 1.0                                        |                  |
|                         | 20.00 nF                                                                                                                                                                                                   | 200 nA           | 1 + 0.5                                        |                  |
|                         | 200.0 nF                                                                                                                                                                                                   | 2 µA             | 1 + 0.5                                        |                  |
|                         | 2.000 µF                                                                                                                                                                                                   | 10 µA            | 1 + 0.5                                        |                  |
|                         | 200 µF                                                                                                                                                                                                     | 100 µA           | 1 + 0.5                                        |                  |
|                         | 10000 µF                                                                                                                                                                                                   | 1 mA             | 2 + 0.5                                        |                  |
| Temperature             | temperature sensors under 2 categories supported - thermocouple (ITS-90 conversion between B / E / J / K / N / R / S /T type), and thermal resistance (RTD sensor conversion between Pt100 and Pt385 type) |                  |                                                |                  |
| Miscellaneous           | barmeter   bar charts, trend chart   Vavg, Vmax, Vmin   standard deviation   DB / DBm   Pass / Fail                                                                                                        |                  |                                                |                  |
| Data-logger Function    |                                                                                                                                                                                                            |                  |                                                |                  |
| Logging Duration        | 5ms -1000s                                                                                                                                                                                                 |                  |                                                |                  |
| Logging Length          | 1M points                                                                                                                                                                                                  |                  |                                                |                  |
| General                 |                                                                                                                                                                                                            |                  |                                                |                  |
| Communication Interface | USB Device / Host, RS232, LAN, and ext. trigger input                                                                                                                                                      |                  |                                                |                  |
| Dimension (W x H x D)   | 235 x 110 x 295 (mm)                                                                                                                                                                                       |                  |                                                |                  |
| Device Weight           | 3.00 kg                                                                                                                                                                                                    |                  |                                                |                  |

Specifications subject to change without prior notice.

+ Accessories

The accessories subject to final delivery.





OW Series Multi in one smart multimeter



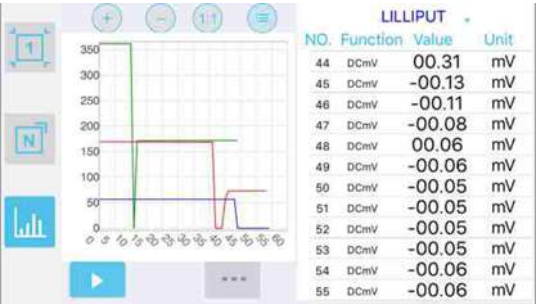
- + 3 5/6 bit resolution
- + BLE 4.0 wireless transmission, more stable, less power consumption
- + Data Logger + Multimeter + Thermometer
- + Chart and Diagram mode helps to analyze the data tendency
- + Support NCV non-contact voltage sense
- + True RMS test supported
- + Build-in offline record function
- + Widely supported on Android, iOS and Windows

on-site temperature test



functioning as multimeter + datalogger

the measured data always updated, and auto- recorded to mobile device, saving labor to do on-site records; the recoding duration, and sampling duration could be customized, accessible in chart mode, facilitating comparison analysis between several multimeters



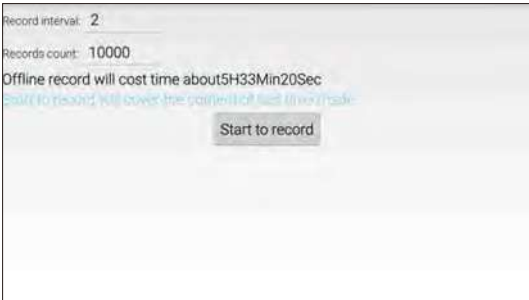
NCV (Non-Contact Voltage) Sensor

When the non-contact voltage sensor is placed near to a live conductor, the instrument will beep and flash the row of LEDs at the top of the display depending on the AC voltage strength.



offline recording function - your process analyzer

possible to record data into memory, but no need to leave mobile device on-site when data-processing, use mobile device to recall the saved data and offline recording



OW16 /OW18 Multi in one smart multimeter

|                    |                                                             | OW16A/B Measurement        | OW18A/B Measurement | Accuracy      |
|--------------------|-------------------------------------------------------------|----------------------------|---------------------|---------------|
| DC Voltage         | mV                                                          | 600mV/6.000V/60.00V/600.0V |                     | ±(0.5%+2 dig) |
|                    | V                                                           | 1000V                      |                     | ±(0.8%+2 dig) |
| AC Voltage         | mV                                                          | 600.0mV                    |                     | ±(2%+5dig)    |
|                    | mV                                                          | 6.000V/60.00V/600.0V       |                     | ±(0.8%+3dig)  |
|                    | V                                                           | 750V                       |                     | ±(1%+3dig)    |
| DC Current         | µA                                                          | /                          | 600.0µ/6000µ        | ±(0.8%+2dig)  |
|                    | mA                                                          | 60.00mA/600.0mA            |                     | ±(0.8%+2dig)  |
|                    | A                                                           | 10.00A/20.00A              |                     | ±(1.2%+3dig)  |
| AC Current         | µA                                                          | /                          | 600.0µ/6000µ        | ±(1%+3dig)    |
|                    | mA                                                          | 60.00mA/600.0mA            |                     | ±(1%+3dig)    |
|                    | A                                                           | 10.00A                     |                     | ±(1.5%+3dig)  |
| Resistance         | 600.0Ω/6.000kΩ/60.00kΩ/600.0kΩ/6.000MΩ                      |                            |                     | ±(0.8%+2dig)  |
|                    | 60.00MΩ                                                     |                            |                     | ±(2%+3dig)    |
| Capacitance        | 60.00nF/600.0nF/6.000µ/60.00µ                               |                            |                     | ±(3%+3dig)    |
|                    | 600.0µ/6.000mF/60.00mF                                      |                            |                     | ±(3%+5dig)    |
| Frequency          | 9.999Hz/99.99Hz/999.9Hz/9.999kHz/99.99kHz/999.9kHz/9.999MHz |                            |                     | ±(0.8%+2dig)  |
| Duty Ratio         | 0.1%-99.9%(typical value: rms=1V,f=1kHz)                    |                            |                     | ±(1.2%+3dig)  |
|                    | 0.1%-99.9%(≥kHz)                                            |                            |                     | ±(2.5%+3dig)  |
| Temperature        | - 50 °C - 400°C                                             |                            |                     | ±(2.5%+3dig)  |
|                    | -58 °F - 752 °F                                             |                            |                     | ±(4.5%+5dig)  |
| Display            | 5999                                                        |                            |                     |               |
| Frequency Response | (40 - 1000) Hz                                              |                            |                     |               |
| Shift Rate         | 3次second                                                    |                            |                     |               |

Special Function

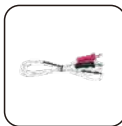
|                       |              |                                |                                                                         |
|-----------------------|--------------|--------------------------------|-------------------------------------------------------------------------|
| Bluetooth Module      | OW16B, OW18B | Auto Ranging                   | √                                                                       |
| True RMS              | √            | Auto- / Manual Range Selection | √                                                                       |
| Diode Test            | √            | Input Protection               | √                                                                       |
| LCD Backlight         | √            | Input Impedance                | ≥10MΩ                                                                   |
| On-off Warning        | √            | Safety Compliance              | 600V CATⅢ (OW16A,OW16B)<br>1000V CATⅢ (OW18A,OW18B)                     |
| Flashlight            | OW18A, OW18B |                                |                                                                         |
| Low-battery Indicator | √            | NCV                            | √                                                                       |
| Data Hold             | √            | Dimension (W / H / D)          | 147mm x 74mm x 49mm (OW16A, OW16B)<br>190mm x 90mm x56mm (OW18A, OW18B) |
|                       |              |                                |                                                                         |
| Relative Measurement  | √            | Weight (without package)       | 0.29 kg(OW16A, OW16B), 0.32kg(OW18A, OW18B)                             |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Multimeter Leads



K-type Thermocouple



Quick Guide



Screwdriver



Alligator Clip (optional)

OW18D/E Multi in one multimeter

|                    | OW18D/E Measurement Range                                               | Accruacy        |
|--------------------|-------------------------------------------------------------------------|-----------------|
| DC Voltage         | 20.000mV/200.00mV                                                       | ±(0.05%+10 dig) |
|                    | 2.0000V/20.000V/200.00V                                                 | ±(0.1%+2 dig)   |
|                    | 1000.0V                                                                 | ±(0.15%+5 dig)  |
| AC Voltage         | 20.000mV/200.00mV                                                       | ±(0.5%+10dig)   |
|                    | 2.0000V/20.000V/200.00V                                                 |                 |
|                    | 750.00V                                                                 | ±(0.8%+10dig)   |
| DC Current         | 200.00uA                                                                | ±(0.5%+10dig)   |
|                    | 2.0000mA/20.000mA/200.00mA                                              |                 |
|                    | 20.000A                                                                 | ±(2.0%+10dig)   |
| AC Current         | 200.00uA                                                                | ±(0.8%+10dig)   |
|                    | 2.0000mA/20.000mA/200.00mA                                              |                 |
|                    | 20.000A                                                                 | ±(2.5%+10dig)   |
| Resistance         | 200.00Ω                                                                 | ±(0.5%+10dig)   |
|                    | 2.0000kΩ                                                                | ±(0.3%+3dig)    |
|                    | 20.000kΩ200.00kΩ2.0000MΩ                                                | ±(0.3%+1dig)    |
|                    | 20.000MΩ                                                                | ±(0.5%+1dig)    |
| Capacitance        | 200.00MΩ                                                                | ±(5.0%+10dig)   |
|                    | 2.0000nF/20.000nF/200.00nF/2.0000μ/20.000μ<br>200.00μ/2.0000mF/20.000mF | ±(3.0%+10dig)   |
| Frequency          | 20.000Hz/200.00Hz/2.0000kHz<br>20.000kHz/200.00kHz/2.0000MHz/20.000MHz  | ±(0.1%+4dig)    |
| Duty Ratio         | 0.1%~99.9%(typical value: rms=1V,f=1kHz)                                | ±(1.2%+3dig)    |
|                    | 0.1%~99.9%(≥kHz)                                                        | ±(2.5%+3dig)    |
| Temperature        | - 50 °C400°C(1°C)                                                       | ±(1.0%+3°C)     |
|                    | -58 °F ~ 752 °F(1°F)                                                    | ±(1.2%+6°F)     |
| Display            | 19999                                                                   |                 |
| Frequency Response | (40 - 1000) Hz                                                          |                 |
| Sample rate        | 3 times/second                                                          |                 |

Special Function

|                       |   |                                  |                       |
|-----------------------|---|----------------------------------|-----------------------|
| True RMS              | √ | Auto Ranging                     | √                     |
| Diode Test            | √ | LCD Backlight                    | √                     |
| Auto Power-off        | √ | Automatic-manual Range Selection | √                     |
| On-off Warning        | √ | Input Protection                 | √                     |
| Low-battery Indicator | √ | Input Impedance                  | ≥10MΩ                 |
| Data Hold             | √ | Safety Compliance                | 600V CATIV 1000V CATⅢ |
| Relative Measurement  | √ | NCV                              | √                     |
| Flashlight            | √ | Dimension (W×H×D)                | 190 x 90 x56 (mm)     |
|                       |   | Weight (without package)         | 0.32 kg               |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Multimeter Leads



K-typeThermocouple



Quick Guide



9V battery (optional)



Alligator Clip (optional)

Bluetooth Digital Multimeter

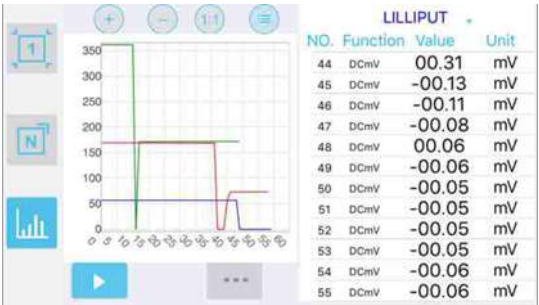


- + function as 3 in 1 : datalogger + multimeter + temperature meter
- + multi-connection (more than one device) supported via mobile app
- + the change trend analysis accessible via special chart mode
- + voice warning supported, which assures measurement safety
- + smart voice-reading accessible
- + 4000 / 6000 / 22000 - count full scale reading
- + larger display, easier data-reading; simulated bar chart
- + offline recording function (only in B33+, B35+, B35T+, and B41T+)
- + true RMS value available (only in D35T, B35T, B35T+, and B41T+)
- + Bluetooth 4.0 version - supports mobile device with Android 4.3 or above / iOS 7.0 or above OS, and equipped with ble 4.0 module



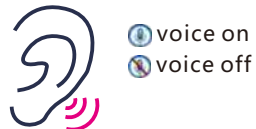
functioning as multimeter + datalogger

the measured data always updated, and auto- recorded to mobile device, saving labor to do on-site records; the recording duration, and sampling duration could be customized, accessible in chart mode, facilitating comparison analysis between several multimeters



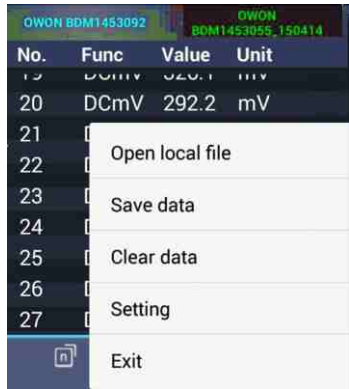
remote control supported

the function activated after TTS voice pack installed, which frees the eye-watch, making on-site measurement more comfortable



data- saving, recalling, and comparatively analyzing

CSV format data export supported, the history data could be recalled for comparison analysis; with the assistance of chart mode, the measured result more visualized, easier for decision- making





Bluetooth Digital Multimeter

offline recording function - your process analyzer

B33+ / B35+ / B35T+ / B41T+ possible to record data into memory, but no need to leave mobile device on-site when data-processing, use mobile device to recall the saved data offline data-recording could continue for max 7 days (168 hours)



Model: D35, D35T, B35T+, D33, B33+

| Basic Function     | 35 Series Measurement Range                                     | 33 Series Measurement Range                                   | Optimal Accuracy |
|--------------------|-----------------------------------------------------------------|---------------------------------------------------------------|------------------|
| DC Voltage         | 60.00mV/600.0mV/6.000V/60.00V<br>600.0V/1000V                   | 400.0mV/4.000V/40.00V/400.0V<br>1000V                         | ±(0.5%+2dig)     |
| AC Voltage         | 60.00mV/600.0mV/6.000V/60.00V<br>600.0V/750V                    | 4.000V/40.00V/ 400.0V/750V                                    | ±(0.8%+2dig)     |
| DC Current         | 600.0A/6.000mA/60.00mA/600.0mA<br>6.000A/ 20.00A                | 400.0μA/4000μA/40.00mA/400.0mA<br>4.000A/10.00A               | ±(0.8%+2dig)     |
| AC Current         | 600.0μA/6.000mA/60.00mA/600.0mA<br>6.000A/20.00A                | 400.0μA/4000μA/40.00mA/400.0mA<br>4.000A/10.00A               | ±(0.8%+2dig)     |
| Resistance         | 600.0Ω/6.000kΩ/60.00kΩ/600.0kΩ<br>6.000MΩ/10.00MΩ               | 400.0Ω/4.000kΩ/40.00kΩ/400.0kΩ<br>4.000MΩ                     | ±(0.8%+2dig)     |
|                    | 60.00MΩ                                                         | 40.00MΩ                                                       | ±(2%+3dig)       |
| Capacitance        | 40.00nF/400.0nF/4.000μF/40.00μF                                 | 40.00nF/400.0nF/4.000μF/40.00μF                               | ±(2.5%+3dig)     |
|                    | 400.0μF/4000μF                                                  | 100.0μF                                                       | ±(3%+5dig)       |
| Frequency          | 9.999Hz/99.99Hz/999.9Hz/9.999kHz<br>99.99kHz/999.9kHz/ 9.999MHz | 4.999Hz/49.99Hz/499.9Hz/4.999kHz<br>49.99kHz/49.9kHz/4.999MHz | ±(0.8%+2dig)     |
| Duty Ratio         | 0.1%-99.9%(typical value: Vrms=1V, f=1kHz)                      |                                                               | ±(1.2%+3dig)     |
|                    | 0.1% -99.9%(≥1kHz)                                              |                                                               | ±(2.5%+2dig)     |
| Temperature        | -50°C-+400°C                                                    |                                                               | ±(2.5%+3dig)     |
|                    | -58°F-+752°F                                                    |                                                               | ±(4.5%+5dig)     |
| Display            | 6000                                                            | 3999                                                          |                  |
| Frequency Response | (40-400)Hz (D35),<br>(40-1000)Hz (D35T, B35T+)                  | (40-400)Hz                                                    |                  |
| Shift Rate         | 3 times / s                                                     |                                                               |                  |

| Capacitance | B41T+ MeasurementRange                 | Optimal Accuracy |
|-------------|----------------------------------------|------------------|
| DC Voltage  | 220mV,2.2V, 22V, 220V,1000V            | ±(0.1%+5dig)     |
| AC Voltage  | 220mV,2.2V,22V,220V,750V               | ±(0.8%+10dig)    |
| DC Current  | 220μA,2200μA,22mA,220mA,20.00A         | ±(0.5%+10dig)    |
| AC Current  | 220μA,2200μA,22mA,220mA,20.00A         | ±(0.8%+10dig)    |
| Resistance  | 220Ω,2.2kΩ,22kΩ,220kΩ,2.2MΩ,22MΩ,220MΩ | ±(0.5%+10dig)    |
| Capacitance | 22nF,220nF,2.2μF,22μF,220μF,2.2mF      | ±(3%+5dig)       |
|             | > 220mF                                |                  |

| Capacitance        | B41T+ Measurement Range                                               | Optimal Accuracy |
|--------------------|-----------------------------------------------------------------------|------------------|
| Frequency          | 22.00Hz, 220.0Hz, 22.000kHz, 220.00kHz, 22.00Hz, 2.2000MHz, 22.000MHz | ±(0.1%+4dig)     |
|                    | > 220MHz                                                              |                  |
| Duty Ratio         | 5.0%-94.9%(typical value: Vrms=1V,f=1kHz) (resolution 0.1%)           | ±(1.2%+3dig)     |
|                    | 0.1%-99.9%(≥1kHz) (resolution 0.1%)                                   | ±(2.5%+3dig)     |
| Temperature        | -50°C-400°C (resolution 0.1°C)                                        | ±(1.0%+5dig)     |
|                    | -58 °F-752 °F (resolution 0.1°F)                                      | ±(1.2%+6dig)     |
| Display            | 21999                                                                 |                  |
| Frequency Response | (40-10000)Hz                                                          |                  |
| Shift Rate         | 3 times/s                                                             |                  |

| Special Function           |                      |                       |                    |
|----------------------------|----------------------|-----------------------|--------------------|
| Auto Ranging               | √                    | Max / Min Value       | √                  |
| Offline Recording Function | B33+, B35T+, B41T+   | Bluetooth Module      | B33+, B35T+, B41T+ |
| Record L length            | 10,000 points        | LCD Backlight         | √                  |
| True RMS                   | B35T+, B41T+         | Data Hold             | √                  |
| Diode Test                 | √                    | Relative Measurement  | √                  |
| Audion Test                | 35 Series, 41 Series | Input Protection      | √                  |
| Auto Power-off             | √                    | Input Impedance       | 10MΩ               |
| On-off Warning             | √                    | Dimension (W x H x D) | 85mm x185mmx30mm   |
| Low-battery Indicator      | √                    | Device Weight         | 0.32kg             |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Multimeter Lead



K-type Thermocouple



Quick Guide



Alligator Clip



Multi-function Test Bench  
(excl. D33 / B33 / B33+)



Soft Bag



BT2.0  
mobile app accessible via scanning QR code



BLE4.0  
mobile app accessible via scanning QR code



iOS  
mobile app accessible via scanning QR code

SP&P4000 Series Single Linear DC Power Supply



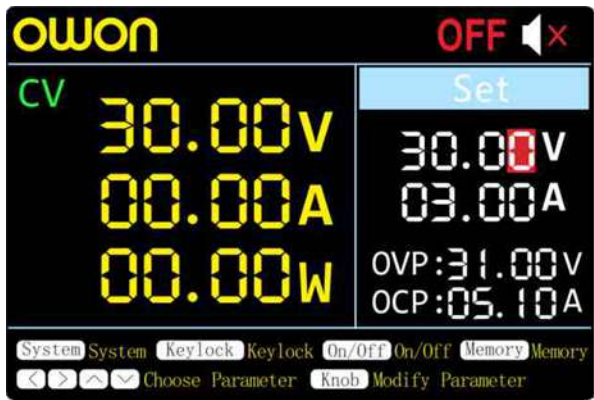
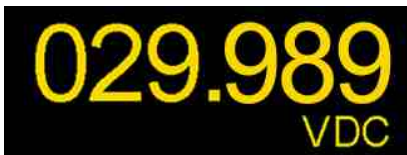
- + Small body for easy carry
- + 180W maximum output power
- + High resolution: 1mV / 1mA (P4000 series), 10mV / 10mA (SP series)
- + Low ripple/noise
- + Over voltage/over current protection
- + Multi-directional cooling system with smart fan (P4000 series)
- + 3.7 inch TFT LCD display
- + Support RS232 digital communication

Large LCD Display

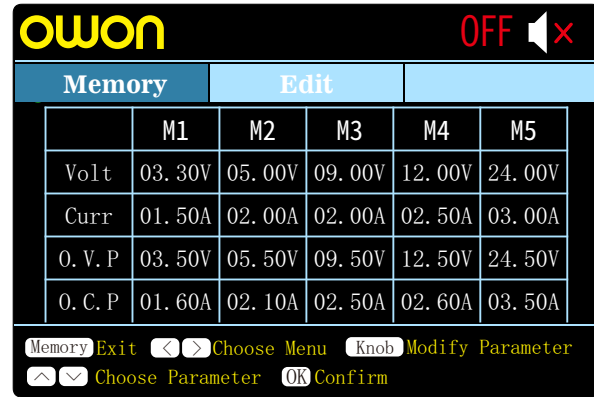
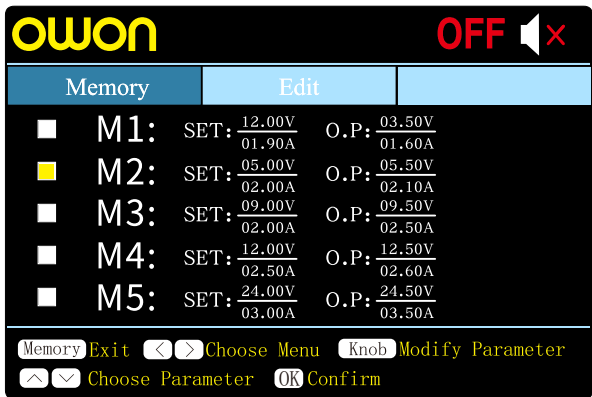


Conventional display example\*

Supports 10mV/10mA Resolution up to Full Load.



Save up to 5 sets of parameters in memory for easy recall.



ODP3031 Single Channel Programmable DC Power Supply



- + One controllable channel + fixed
- + Max output resolution : 1mV / 1mA
- + Low ripples / low noise : <300  $\mu$ Vrms / 2 mVpp
- + Over-voltage / Over-current protection
- + Up to 100 group timers
- + Up to 10 group preset system configurations
- + Auto-cooling system
- + 4 inch high resolution (480 x 320 pixels) LCD
- + USB2.0, and RS232 serial port digital communication supported

| Model                   | SP3051                  | P4305                        | P4603                   | ODP3031                                       |
|-------------------------|-------------------------|------------------------------|-------------------------|-----------------------------------------------|
| Channel                 | Single Channel          |                              |                         |                                               |
| DC Output Rating        | 150W                    |                              | 180W                    | 105W                                          |
| Channel Output          | 0 - 30V / 0 - 5A * 1-CH |                              | 0 - 60V / 0 - 3A * 1-CH | 0 - 30V / 0 - 3A * 1-CH<br>5V/3A fixed output |
| Display Type            | 3.7 inch colored LCD    |                              |                         | 4 inch colored LCD                            |
| Dimension (W x H x D)   | 117x 194 x 295 (mm)     |                              | 250 x 158 x 358 (mm)    |                                               |
| Device Weight           | 3 kg                    | 5.6 kg                       | 5.8 kg                  | 7 kg                                          |
| Communication Interface | RS232                   | USB Device (optional), RS232 |                         | USB Device, RS232                             |

The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment.

| Model                                               |         | SP3051                     | P4305                       | P4603 | ODP3031                                 |
|-----------------------------------------------------|---------|----------------------------|-----------------------------|-------|-----------------------------------------|
| Load Regulation                                     | Voltage | $\leq 30\text{mV}$         | $\leq 0.04\% + 3\text{mV}$  |       | $\leq 0.01\% + 3\text{mV}$              |
|                                                     | Current | $\leq 50\text{mA}$         | $\leq 0.04\% + 3\text{mA}$  |       | $\leq 0.1\% + 3\text{mA}$               |
| Line Regulation                                     | Voltage | $\leq 15\text{mV}$         | $\leq 0.01\% + 3\text{mV}$  |       | $\leq 0.01\% + 3\text{mV}$              |
|                                                     | Current | $\leq 20\text{mA}$         | $\leq 0.01\% + 3\text{mA}$  |       | $\leq 0.2\% + 3\text{mA}$               |
| Settings Resolution                                 | Voltage | 10mV                       | 1mV                         |       | 1mV                                     |
|                                                     | Current | 10mA                       | 1mA                         |       | 1mA                                     |
| Read Back Resolution                                | Voltage | 10mV                       | 1mV                         |       | 1mV (< 10V), 10mV ( $\geq 10\text{V}$ ) |
|                                                     | Current | 10mA                       | 1mA                         |       | 1mA                                     |
| Settings Accuracy (within 12 months)(5°C $\pm$ 5°C) | Voltage | $\leq 0.3\% + 3\text{dig}$ | $\leq 0.03\% + 10\text{mV}$ |       | $\leq 0.05\% + 3\text{mV}$              |
|                                                     | Current | $\leq 0.3\% + 3\text{dig}$ | $\leq 0.1\% + 5\text{mA}$   |       | $\leq 0.1\% + 3\text{mA}$               |
| Read Back Accuracy (5°C $\pm$ 5°C)                  | Voltage | $\leq 0.3\% + 3\text{dig}$ | $\leq 0.03\% + 10\text{mV}$ |       | $\leq 0.05\% + 3\text{dig}$             |
|                                                     | Current | $\leq 0.3\% + 3\text{dig}$ | $\leq 0.1\% + 5\text{mA}$   |       | $\leq 0.1\% + 3\text{dig}$              |
| Noise and Ripple (0Hz-20MHz)                        | Voltage | $\leq 30\text{mVp-p}$      | $\leq 4\text{mVp-p}$        |       | $\leq 2\text{mVp-p}$                    |
|                                                     | Voltage | $\leq 3\text{mVrms}$       | $\leq 1\text{mVrms}$        |       | $\leq 300\mu\text{Vrms}$                |
|                                                     | Current |                            | $\leq 4\text{mA rms}$       |       | $\leq 3\text{mA rms}$                   |
| Storage                                             |         | 5 groups                   |                             |       | 100 groups                              |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable (ODP3031)



Fuse



RS232 Cable (SP & P4000 Series)



Test Leads (optional)



RS232 to USB Module (optional)



## ODP Series Dual Channel Programmable DC Power Supply

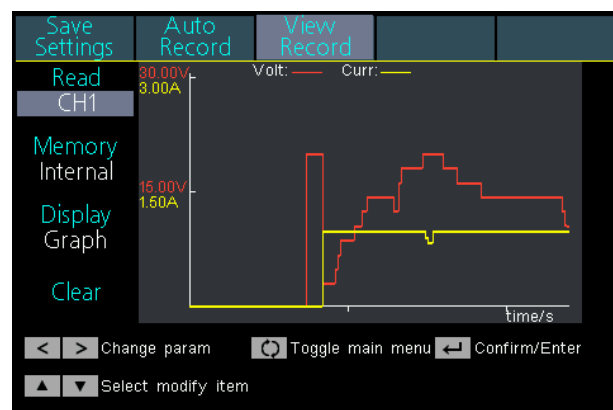


max  
378W  
power output

- + Two independent controllable channels + sense (ODP3122, ODP6062)
- + Two independent controllable channels + fixed (ODP3032)
- + Max output resolution : 1mV / 1mA
- + Low ripples / low noise
- + Up to 100 group timers
- + Over-voltage / Over-current protection
- + Data-logging function: could record the read back voltage and current, display recorded data in chart
- + 4 inch high resolution (480 x 320 pixels) LCD
- + Multi- CI: USB, RS232, and LAN
- + Auto-cooling system
- + SCPI, and LabVIEW supported

### Creative Data Recording Function

to monitor the changing status of powering system, displaying recorded data in chart.



Save Settings

Auto Record

View Record

Read CH1

Memory Internal

Display Table

Clear

| NO. | Volt   | CH1 Curr | Power  |
|-----|--------|----------|--------|
| 61  | 8.708  | 1.998    | 17.395 |
| 62  | 8.708  | 1.998    | 17.395 |
| 63  | 10.605 | 1.998    | 21.184 |
| 64  | 10.605 | 1.998    | 21.185 |
| 65  | 10.605 | 1.998    | 21.185 |
| 66  | 12.510 | 1.998    | 24.990 |
| 67  | 12.512 | 1.998    | 24.993 |
| 68  | 14.406 | 1.998    | 28.776 |
| 69  | 14.406 | 1.998    | 28.776 |
| 70  | 14.406 | 1.998    | 28.774 |

< > Change param

⌚ Toggle main menu

↵ Confirm/Enter

▲ ▼ Select modify item

| Model            | ODP3032                                      | ODP3122 | ODP6062                                     |
|------------------|----------------------------------------------|---------|---------------------------------------------|
| Channel          | 2 (independent controllable channel) + fixed |         | 2 (independent controllable channel) +sense |
| Max Output Power | 195W                                         |         | 378W                                        |
| Output Range     | 0 - 30V / 0- 3A , 5V / 3A                    |         | 0 - 30V / 0-12A ,<br>0 - 6V /0- 3A          |

| Model                 | ODP3032                                         | ODP3122  | ODP6062 |
|-----------------------|-------------------------------------------------|----------|---------|
| Display               | 4 inch color LCD 480 x 320 pixels, 65536 colors |          |         |
| Dimension (W x H x D) | 250 x 158 x 358 (mm)                            |          |         |
| Device Weight         | 10.5 kg                                         | 12.00 Kg |         |

The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment.

| Model                        | ODP3032      | ODP3122               | ODP6062                                                             |
|------------------------------|--------------|-----------------------|---------------------------------------------------------------------|
| Line Regulation              | Voltage      | ≤0.01% + 3mV          | ≤0.01% + 3mV                                                        |
|                              | Current      | ≤0.1% + 3mA           | ≤0.01% + 3mA                                                        |
| Load Regulation              | Voltage      | ≤0.01% + 3mV          | ≤0.01% + 3mV                                                        |
|                              | Current      | ≤0.2% + 3mA           | ≤0.01% + 3mA                                                        |
| Settings Resolution          | Voltage      | 1mV                   | 1mV                                                                 |
|                              | Current      | 1mA                   | 1mA                                                                 |
| Read Back Resolution         | Voltage      | 1mV(<10V), 10mV(≥10V) | 1mV                                                                 |
|                              | Current      | 1mA                   | 1mA                                                                 |
| Settings Accuracy (5°C±5°C)  | Voltage      | ≤0.05% + 3mV          | ≤0.03% + 10mV                                                       |
|                              | Current      | ≤0.1% + 3mA           | ≤0.1% + 8mA                                                         |
| Read Back Accuracy (5°C±5°C) | Voltage      | ≤0.05% + 3mV          | ≤0.03% + 10mV                                                       |
|                              | Current      | ≤0.1% + 3mA           | ≤0.1% + 8mA                                                         |
| Noise and Ripple             | Voltage      | ≤2mVp-p               |                                                                     |
|                              | Voltage      | ≤300μVrms             |                                                                     |
|                              | Current      | ≤3mArms               |                                                                     |
| Programmable Output          | Storage      | 100 groups            |                                                                     |
|                              | Time Setting | second                |                                                                     |
| Data Recording               |              | /                     | 10 K groups (of voltage, current and power data) recording capacity |
| Working Temperature          |              | 0 - 40°C              |                                                                     |
| Communication Interface      |              | USB Device, RS232     | USB Host&Device, RS232, and LAN                                     |

Specifications subject to change without prior notice.

### + Accessories

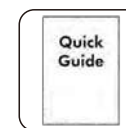
The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Fuse



Test Leads (optional)

ODP Series Thriple Channel Programmable DC Power Supply

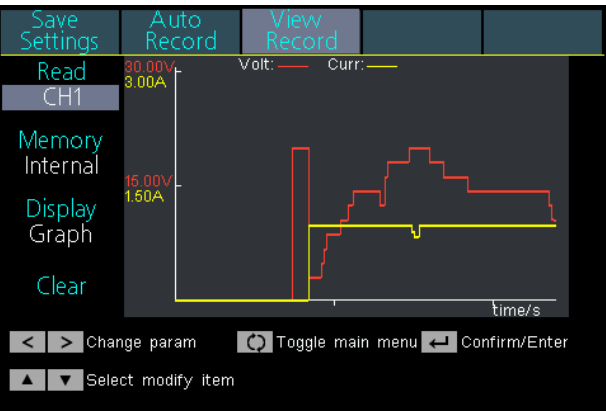


max  
378W  
power output

- + Three independent controllable channels
- + Max output resolution : 1mV / 1mA
- + Low ripples / low noise
- + Up to 100 group timers
- + Multi- working mode : individual, parallel, and series
- + Over-voltage / Over-current protection
- + Data-logging function: could record the read back voltage and current, display recorded data in chart
- + 4 inch high resolution (480 x 320 pixels) LCD
- + Multi- CI: USB, RS232, and LAN
- + Auto-cooling system
- + SCPI, and LabVIEW supported

Creative Data Recording Function

to monitor the changing status of powering system, displaying recorded data in chart.



|                                             |             |             |        |  |
|---------------------------------------------|-------------|-------------|--------|--|
| Save Settings                               | Auto Record | View Record |        |  |
| Read CH1                                    |             |             |        |  |
| Memory Internal                             |             |             |        |  |
| Display Graph                               |             |             |        |  |
| Clear                                       |             |             |        |  |
| NO. CH1                                     |             |             |        |  |
| Volt Curr Power                             |             |             |        |  |
| 61                                          | 8.708       | 1.998       | 17.395 |  |
| 62                                          | 8.708       | 1.998       | 17.395 |  |
| 63                                          | 10.605      | 1.998       | 21.184 |  |
| 64                                          | 10.605      | 1.998       | 21.185 |  |
| 65                                          | 10.605      | 1.998       | 21.185 |  |
| 66                                          | 12.510      | 1.998       | 24.990 |  |
| 67                                          | 12.512      | 1.998       | 24.993 |  |
| 68                                          | 14.406      | 1.998       | 28.776 |  |
| 69                                          | 14.406      | 1.998       | 28.776 |  |
| 70                                          | 14.405      | 1.998       | 28.774 |  |
|                                             |             |             |        |  |
| Change param Toggle main menu Confirm/Enter |             |             |        |  |
| Select modify item                          |             |             |        |  |

| Model   | Channel                              | Max Output Power | Output Range                  |
|---------|--------------------------------------|------------------|-------------------------------|
| ODP3033 | 3 (independent controllable channel) | 198W             | 30V / 3A    30V / 3A, 6V / 3A |
| ODP3053 |                                      | 318W             | 30V / 5A    30V / 5A, 6V / 3A |
| ODP3063 |                                      | 378W             | 30V / 6A    30V / 6A, 6V / 3A |
| ODP6033 |                                      | 378W             | 60V / 3A    60V / 3A, 6V / 3A |

| Model                 | ODP3033                                         | ODP3053  | ODP3063 | ODP6033 |
|-----------------------|-------------------------------------------------|----------|---------|---------|
| Display               | 4 inch color LCD 480 x 320 pixels, 65536 colors |          |         |         |
| Dimension (W x H x D) | 250 x 158 x 358 (mm)                            |          |         |         |
| Device Weight         | 9.80 kg                                         | 12.00 kg |         |         |

The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment.

| Model                                                |                         | ODP3033                                                             |     | ODP3053 |     | ODP3063 |     | ODP6033 |     |           |
|------------------------------------------------------|-------------------------|---------------------------------------------------------------------|-----|---------|-----|---------|-----|---------|-----|-----------|
| Channel                                              |                         | CH1                                                                 | CH2 | CH1     | CH2 | CH1     | CH2 | CH1     | CH2 | CH3       |
| Output Ratings<br>(0°C - 40°C)                       | Voltage                 | 0-30V                                                               |     | 0-30V   |     | 0-30V   |     | 0-60V   |     | 0-6V      |
|                                                      | Over Voltage Protection | 31V                                                                 |     | 31V     |     | 31V     |     | 61V     |     | 7V        |
|                                                      | Current                 | 0-3A                                                                |     | 0-5A    |     | 0-6A    |     | 0-3A    |     | 0-3A      |
|                                                      | Over Current Protection | 3.1A                                                                |     | 5.1A    |     | 6.1A    |     | 3.1A    |     | 3.1A      |
| Load Regulation                                      | Voltage                 | ≤0.01%+3mV                                                          |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.01%+3mA                                                          |     |         |     |         |     |         |     |           |
| Line Regulation                                      | Voltage                 | ≤0.01%+3mV                                                          |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.01%+3mA                                                          |     |         |     |         |     |         |     |           |
| Settings Resolution                                  | Voltage                 | 1mV                                                                 |     |         |     |         |     |         |     |           |
|                                                      | Current                 | 1mA                                                                 |     |         |     |         |     |         |     |           |
| Read Back Resolution                                 | Voltage                 | 1mV                                                                 |     |         |     |         |     |         |     |           |
|                                                      | Current                 | 1mA                                                                 |     |         |     |         |     |         |     |           |
| Settings Accuracy<br>(25°C ± 5°C) (within 12 months) | Voltage                 | ≤0.03%+10mV                                                         |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.1%+8mA                                                           |     |         |     |         |     |         |     | ≤0.1%+5mA |
| Read Back Accuracy<br>(25°C ± 5°C)                   | Voltage                 | ≤0.03%+10mV                                                         |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.1%+8mA                                                           |     |         |     |         |     |         |     | ≤0.1%+5mA |
| NoiseandRipple<br>(20Hz - 20MHz)                     | Voltage(Vp-p)           | ≤2mVp-p                                                             |     |         |     |         |     |         |     | ≤3mVp-p   |
|                                                      | Voltage(rms)            | ≤300μVrms                                                           |     |         |     |         |     |         |     |           |
|                                                      | Current(rms)            | ≤3mArms                                                             |     |         |     |         |     |         |     | ≤4mArms   |
| Output Temperature Coefficient<br>(0°C40°C)          | Voltage                 | ≤0.03%+10mV                                                         |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.1%+5mA                                                           |     |         |     |         |     |         |     |           |
| Read Back Temperature Coefficient                    | Voltage                 | ≤0.03%+10mV                                                         |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.1%+5mA                                                           |     |         |     |         |     |         |     |           |
| Parallel Settings Accuracy                           | Voltage                 | ≤0.02%+5mV                                                          |     |         |     |         |     |         |     |           |
|                                                      | Current                 | ≤0.1%+30mA                                                          |     |         |     |         |     |         |     |           |
| ProgrammableOutput                                   | Storage                 | 1Mpts                                                               |     |         |     |         |     |         |     |           |
|                                                      |                         | 100 groups                                                          |     |         |     |         |     |         |     |           |
|                                                      | Time Setting            | second                                                              |     |         |     |         |     |         |     |           |
| Data Recording                                       |                         | 10K groups (of voltage, current and power data ) recording capacity |     |         |     |         |     |         |     |           |
| Working Temperature                                  |                         | 0-40°C                                                              |     |         |     |         |     |         |     |           |
| Communication Interface                              |                         | USBHost,USBDevice,RS232,LAN                                         |     |         |     |         |     |         |     |           |

Specifications subject to change without prior notice.

+ Accessories The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Fuse



Test Leads (optional)



Differential Probe



| Model                           | OD5140                     | OD5070                     | OD5015                     |
|---------------------------------|----------------------------|----------------------------|----------------------------|
| Bandwidth(-3dB)                 | 100MHz                     | 50MHz                      | DC-100MHz(-3dB)            |
| Attenuation Ratio               | 1:1000;1:100               |                            |                            |
| Accuracy                        | ±1%                        |                            |                            |
| Impedance                       | 10MΩ//2PF                  |                            | 4MΩ//2PF                   |
| Output Voltage (into 50KΩ load) | 7V                         |                            |                            |
| Offset                          | < ±5mV                     |                            |                            |
| Impedance                       | 50Ω                        |                            |                            |
| CMRR                            | -80dB@60Hz,-50dB@100KHz    |                            |                            |
| Input Differential Vp-p         | 14KV@1/1000<br>1.4KV@1/100 | 7000V@1/1000<br>700V@1/100 | 1500V@1/1000<br>150V@1/100 |
| Power Requirements (Options)    | 6VDC/300mA mains adaptor   |                            |                            |
| Length of BNC Cable             | 90cm                       |                            |                            |
| Length of Input Leads           | 60cm                       |                            |                            |
| Device Weight                   | 500g                       |                            |                            |
| Dimension                       | 186x84x38mm                |                            | 165x69x26mm                |

Current Probe



| Model                 | CP-05 <sup>+</sup>     |                    |             |             |                      |         |                |
|-----------------------|------------------------|--------------------|-------------|-------------|----------------------|---------|----------------|
| Test Range            | 1mA - 400A             | AC Current         | Range       | AC 4A       | AC 40A               | AC 200A | AC 200A - 400A |
| Resolution            | 1mA                    |                    | Accuracy    | ±2.0%rdg±5d |                      |         | ±3.0%rdg±5d    |
| Bandwidth             | DC~200KHz(±3dB)        |                    | Sensitivity | 1mV/10mA    | 1mV/0.1A             |         | 1mV/1A         |
| Jaw Size              | 23mm (max)             | DC Current         | Range       | DC 4A       | DC 40A               | DC 200A | DC 200-400A    |
| Auto Zero at Power-on | √                      |                    | Accuracy    | ±1.5%rdg±5d |                      |         | ±3.0%rdg±5d    |
| Power Supply          | 9V 6F22 Battery        |                    | Sensitivity | 1mV/10mA    | 1mV/0.1A             | 1mV/1A  |                |
| Operating Temperature | 0°C to 40°C<br>≤70% RH | Operating Humidity |             |             | -10°C to 60°C 70% RH |         |                |
| Dimension (W x H x D) | 180 x 30 x 44 (mm)     |                    |             |             |                      |         |                |
| Device Weight         | about 200g             |                    |             |             |                      |         |                |

High Voltage Probe



| Model                   | OH5040                                     | OH5018                                     | Model                   | OH5007                                                         |
|-------------------------|--------------------------------------------|--------------------------------------------|-------------------------|----------------------------------------------------------------|
| Max.Working Voltage     | DC+AC(peak)40KVCATII<br>AC(rms): 27KVCATII | DC+AC(peak)18KVCATII<br>AC(rms): 12KVCATII | Max.Working Voltage     | DC: 0-10KV<br>AC(rms): 0 ~ 7KV; Vpp: 0-20KV(Pulse)             |
| Thepulse                | <27KVp-p                                   | <12KVp-p                                   | Bandwidth(-3dB)         | 50MHz                                                          |
| Max.Loading Current     | 43μA                                       | 90μA                                       | noise                   | >60dB(1KHz), >50dB(1MHz)                                       |
| Bandwidth(-3dB)         | 50MHz                                      | 100MHz                                     | Attenuation Ratio       | 1: 1000                                                        |
| noise                   | >60dBat1KHz; >50dBat1MHz                   |                                            | Accuracy                | DC:±3%(DCto10KV)<br>AC:±3%(1KHz/1KV/1KHzRMS)<br>-3dB:0 ~ 40MHz |
| Attenuation Ratio       | 1000: 1                                    |                                            | Impedance               | 100MΩ±5%                                                       |
| Accuracy                | DC:≤3%;AC:≤3%(1KHz)                        |                                            | Input Capacitor         | 3.0PF±0.5PF                                                    |
| Impedance               | 900MΩ                                      | 200MΩ                                      | Cable Length            | 2m±0.2m                                                        |
| Input Capacitor         | 2PF                                        | 1.5PF                                      | Temperature Coefficient | ≤200PPM/°C                                                     |
| Cable Length            | 2m±0.2m                                    |                                            | Operation Temp          | 0 ~ +50°C                                                      |
| Temperature Coefficient | ≤200PPM/°C                                 |                                            | Dimension               | 340 x80Φ (cylindrical)                                         |
| Operation Temp          | -10 ~ 55°C                                 |                                            | Device Weight           | 250g                                                           |
| Dimension               | 80(W)x80(H)x320(L)mm                       |                                            |                         |                                                                |
| Device Weight           | 460g                                       |                                            |                         |                                                                |



| Model                 | CP-07 <sup>+</sup>     |                    |             |                      |          |
|-----------------------|------------------------|--------------------|-------------|----------------------|----------|
| Test Range            | 400mA - 4A             | DC Current         | Range       | DCA 400mA            | DCA 4A   |
| Resolution            | 0.1mA                  |                    | Accuracy    | ±1.5%rdg±5d          |          |
| Bandwidth             | DC~1MHz(±3dB)          |                    | Sensitivity | 1mV/1mA              | 1mV/10mA |
| Jaw Size              | 5mm (max)              |                    | Range       | ACA 400mA            | ACA 4A   |
| Auto Zero at Power-on | √                      | AC Current         | Accuracy    | ±2.0%rdg±5d          |          |
| Power Supply          | 9V 6F22 Battery        |                    | Sensitivity | 1mV/1mA              | 1mV/10mA |
| Operating Temperature | 0°C to 40°C<br>≤70% RH | Operating Humidity |             | -10°C to 60°C 70% RH |          |
| Dimension (W x H x D) | 215 x 36 x 58 (mm)     |                    |             |                      |          |
| Device Weight         | about 200g             |                    |             |                      |          |

Current Probe



| Model                   | C5010                             |
|-------------------------|-----------------------------------|
| Measuring Range         | 0.05A-10A    1A-100A              |
| Voltage                 | 1V Peak                           |
| Conversion Ratio        | 100mA/V    10mA/V                 |
| Bandwidth               | 100KHz                            |
| Diameter mouth diameter | 11.8mm                            |
| Operating temperature   | 0°C- 50°C                         |
| Battery                 | 9V Alkaline battery               |
| Accuracy                | 2%                                |
| Dimension               | 231×67×36 (mm), 2m Cable length   |
| Device Weight           | about 330g (Containing batteries) |

Oscilloscope Probe

|  |                   |                                        |                                        |
|--|-------------------|----------------------------------------|----------------------------------------|
|  | Model             | T5100                                  | T5200                                  |
|  | Attenuation Ratio | 1X or 10X                              | 1X or 10X                              |
|  | Bandwidth         | 100MHz                                 | 200MHz                                 |
|  | Input R           | 1MΩ or 10MΩ                            | 1MΩ or 10MΩ                            |
|  | Input C           | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF |
|  | Max Input Voltage | 1X: <200V<br>10X: <600V                | 1X: <200V<br>10X: <600V                |
|  |                   |                                        |                                        |

|  |                   |                 |                 |
|--|-------------------|-----------------|-----------------|
|  | Model             | T3060           | T3100           |
|  | Attenuation Ratio | 100X            | 100X            |
|  | Bandwidth         | 60MHz           | 100MHz          |
|  | Input R           | 100MΩ           | 100MΩ           |
|  | Input C           | 18.5pF - 22.5pF | 18.5pF - 22.5pF |
|  | Max Input Voltage | <2KV            | <2KV            |
|  |                   |                 |                 |

Oscilloscope Probe

|  |                   |       |        |        |
|--|-------------------|-------|--------|--------|
|  | Model             | P4060 | P4100  | P4250  |
|  | Attenuation Ratio | 100X  | 100X   | 100X   |
|  | Bandwidth         | 60MHz | 100MHz | 250MHz |
|  | Input R           | 100MΩ | 250MHz | 250MHz |
|  | Input C           | 5pF   | 5pF    | 5pF    |
|  | Max Input Voltage | <2KV  | <2KV   | <2KV   |
|  |                   |       |        |        |

|  |                   |                                        |                                        |                                        |                                        |
|--|-------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
|  | Model             | OW3060                                 | OW3100                                 | OW3200                                 | OW3300                                 |
|  | Attenuation Ratio | 1X or 10X                              | 1X or 10X                              | 1X or 10X                              | 1X or 10X                              |
|  | Bandwidth         | 6MHz/60MHz                             | 6MHz/100MHz                            | 6MHz/200MHz                            | 6MHz/300MHz                            |
|  | Input R           | 1MΩ or 10MΩ                            | 1MΩ or 10MΩ                            | 1MΩ or 10MΩ                            | 1MΩ or 10MΩ                            |
|  | Input C           | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF | 1X: 85pF -115pF<br>10X: 14.5pF -17.5pF |
|  | Max Input Voltage | 1X: <200V<br>10X: <600V                | 1X: <200V<br>10X: <600V                | 1X: <200V<br>10X: <600V                | 1X: <200V<br>10X: <600V                |
|  |                   |                                        |                                        |                                        |                                        |

|  |                   |                                        |
|--|-------------------|----------------------------------------|
|  | Model             | P7300                                  |
|  | Attenuation Ratio | 1X or 10X                              |
|  | Bandwidth         | 6MHz / 300MHz                          |
|  | Input R           | 1MΩ or 10MΩ                            |
|  | Input C           | 1X: 85pF -120pF<br>10X: 18.5pF -22.5pF |
|  | Max Input Voltage | 1X: <300V<br>10X: <600V                |
|  |                   |                                        |

|  |                   |                                    |
|--|-------------------|------------------------------------|
|  | Model             | P2060                              |
|  | Attenuation Ratio | 1X or 10X                          |
|  | Bandwidth         | 60MHz                              |
|  | Input R           | 1MΩ or 10MΩ                        |
|  | Input C           | 1X: 70pF -120pF<br>10X: 14pF -18pF |
|  | Max Input Voltage | 1X: <200V<br>10X: <600V            |
|  |                   |                                    |

|  |                   |                |
|--|-------------------|----------------|
|  | Model             | TH3100A        |
|  | Attenuation Ratio | 100X           |
|  | Bandwidth         | 100MHz         |
|  | Input R           | 100MΩ          |
|  | Input C           | 3.5pF - 10.5pF |
|  | Max Input Voltage | <5KV           |
|  |                   |                |