

## Product Catalogue

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

owon<sup>®</sup> product line - Created by LILLIPUT<sup>®</sup>

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# About OWON®

We at [owon.co.uk](http://owon.co.uk) supply and support the complete range of Owon test and measurement equipment in the UK and Europe. We have our main product groups; Oscilloscopes, Multimeters, Power Supplies, Signal Generator and Spectrum Analysers. We carry a comprehensive stock of the most popular products warehoused in the UK, ready for immediate dispatch.

## 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

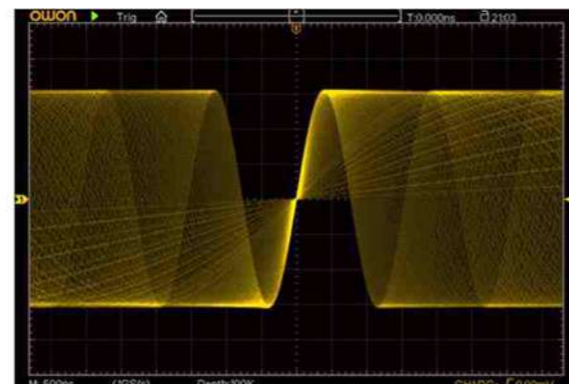
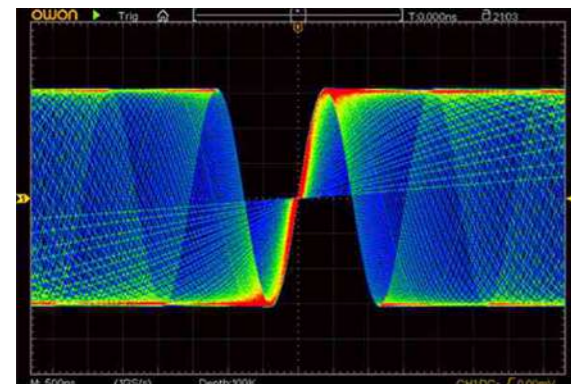
### n-in-1

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 31.25 $\mu$ V/div (XDS3202A, XDS3102AP).

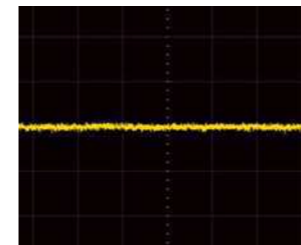


2. multi-level grayscale, and color temperature display



## 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

M.Bus 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



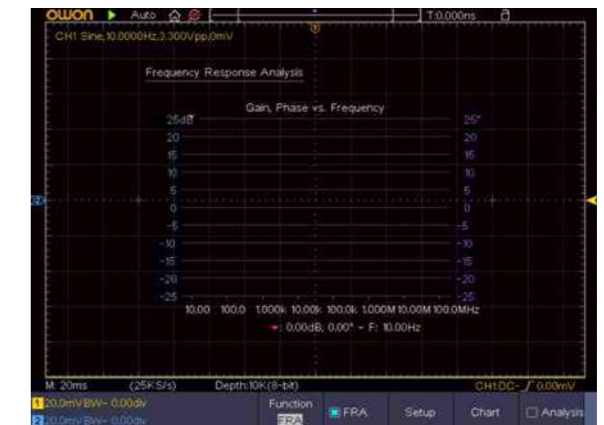
via app s/w, waveform data-saving, checking, co-sharing is possible, co-analyzing hence realizes

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, I <sup>2</sup> C, SPI, and RS232/UART							
Trigger Type (optional)	CAN							
Bus Decoding (optional)	I <sup>2</sup> C, 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 $\downarrow$ , Delay A→B $\uparrow$ , +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	I <sup>2</sup> C	I <sup>2</sup> C
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)) 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, I <sup>2</sup> C, SPI, and RS232/UART							
Trigger Type (optional)	CAN							
Bus Decoding(optional)	I <sup>2</sup> C, 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 $\downarrow$ , Delay A→B $\uparrow$ , Phase A→B $\downarrow$ , Phase A→B $\uparrow$ , +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 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) 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.



#### optional accessories:



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



- + Optional **BATTERY** available

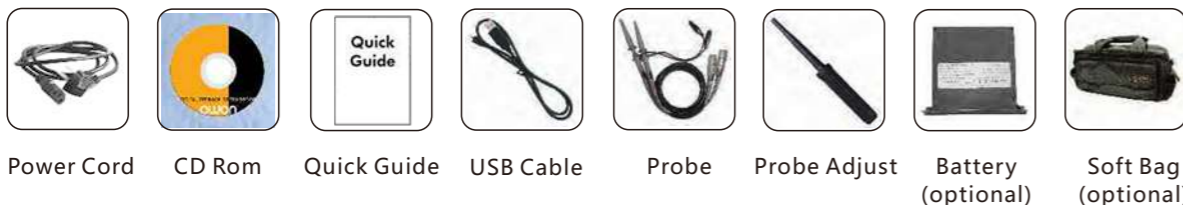


Model	SDS6062	SDS7072	SDS7102	SDS7202	SDS8102	SDS8202	SDS8302	SDS9302
Bandwidth	60MHz	70MHz	100MHz	200MHz	100MHz	200MHz		300MHz
Channel	2 + 1 (external)							
Sample Rate	500MS/s	1GS/s		2GS/s		2.5GS/s	3.2GS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5	2ns/div - 100s/div, step by 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.



## SDS-E Series digital storage oscilloscope



- + 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)

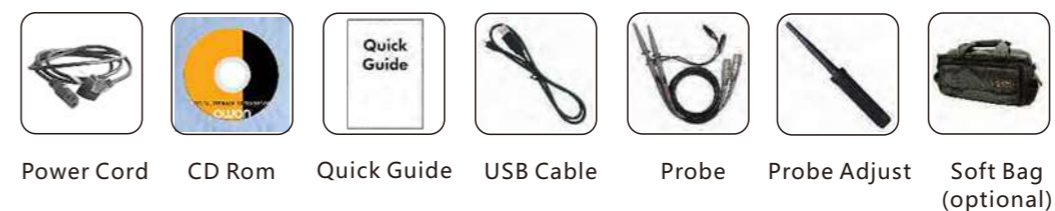


Model	SDS5032E	SDS5052E	SDS6062E	SDS7072E	SDS7102E	SDS7122E
Bandwidth	30MHz	50MHz	60MHz	70MHz	100MHz	125MHz
Channel	2 + 1 (external)					
Sample Rate	500MS/s			1GS/s		
Record Length	10K		1M		1M (optional 10M)	
Display	8" color LCD, 800 x 600 pixels					
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 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.



## SDS1000S Series digital storage oscilloscope



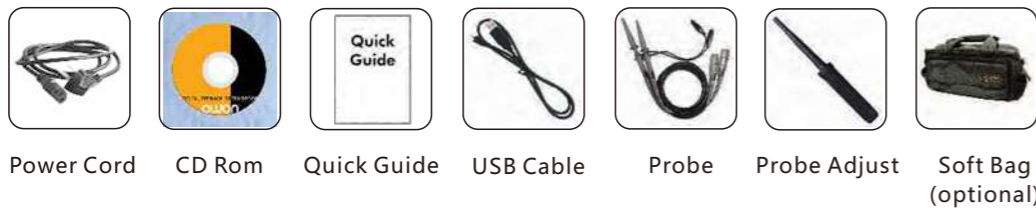
- + Bandwidth : 20MHz-200MHz
- + 2-Channel
- + Sample rate : 100MS/s - 1GS/s
- + Ultra-thin body
- + 7 inch high resolution LCD
- + SCPI, and LabVIEW supported



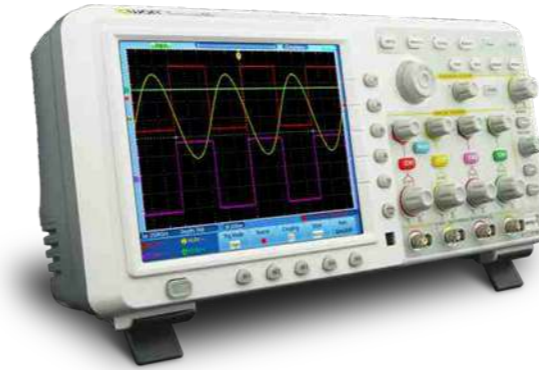
Model	SDS1022	SDS1052	SDS1102	SDS1202
Bandwidth	20MHz	50MHz	100MHz	200MHz
Channel	2			
Sample Rate	100MS/s	500MS/s	1GS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5		2ns/div - 100s/div, step by 1 - 2 - 5	
Display	7" color LCD, 800 x 480 pixels			
Input Impedance	1MΩ ± 2%, in parallel 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

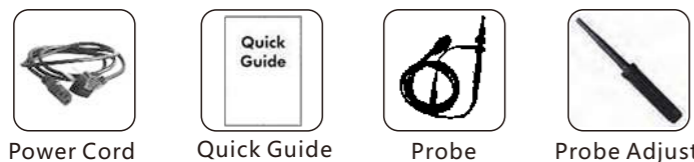


Model	AS101	AS201
Bandwidth	DC:0-10MHz, AC: 10 Hz-10MHz	DC:0-20MHz, AC: 10 Hz-20MHz
Channel	1	
Horizontal system	Sample Rate	100MS/s
	Scanning speed (S/DIV)	0.05us/DIV - 0.1s/DIV, step by 1 - 2 - 5
	Trimming Ratio	≥2.5:1
Vertical system	Sensitivity	5 mV/DIV ~ 10 V/DIV
	Displacement	±10DIV
	Low Frequency	≥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)	
<b>X-Y Model</b>		
Sensitivity	X:0.5V/DIV Y:0.1V/DIV - 1V/DIV	
Bandwidth(-3dB)	DC: 0 - 1MHz AC: 10Hz - 1MHz	
<b>Trigger</b>		
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 MΩ±2%, in parallel with 20 pF±5 pF	
Ext. Trigger Max. Input Voltage	400Vpp	
<b>Trigger Output of the probe compensator</b>		
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.



## 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.



## 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, DelayA→B					
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 x 18 x 120 (mm)			190 x 18 x 120 (mm)		
Device Weight	0.26 kg				0.3kg	

Specifications subject to change without prior notice.

### + Accessories

The accessories subject to final delivery.



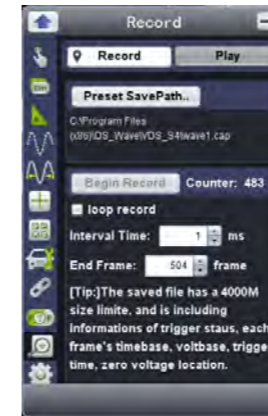
\* Power cord and adapter only available for models with LAN port.

## VDS2064 & VDS3104 Automotive Diagnostics Kits

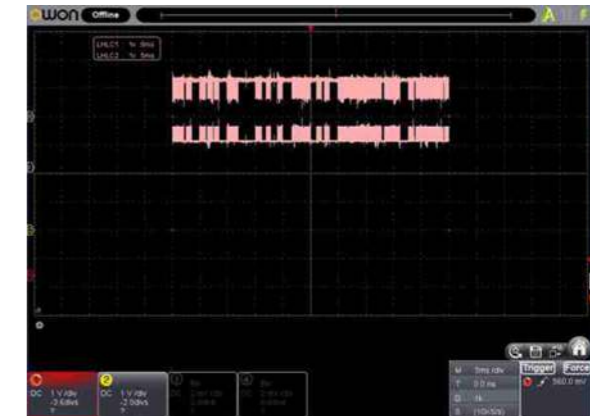


Model	VDS2064	VDS3104
Bandwidth	60MHz	100MHz
Channel	4	
Sample Rate	1GS/s	
Record Length	5M	

### 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 ACV: 4V - 750V	DCA: 40mA - 10A ACA: 40mV - 10A	400Ω 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 ACV: 4V - 750V	DCA: 40mA - 10A ACA: 40mV - 10A	400Ω 4KΩ - 40MΩ	✓	✓

Specifications subject to change without prior notice.

### + Accessories

The accessories subject to final delivery.



## XSA1000 Series Spectrum Analyzer

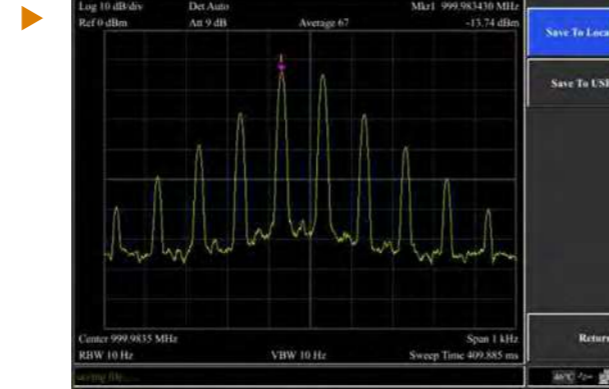
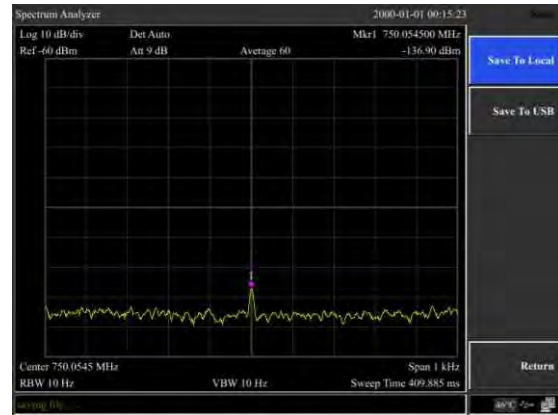


- + Frequency Range 9kHz-7.5GHz
- + -160dBm Displayed Average Noise Level
- + Phase Noise -82dBc/Hz @1Gz and offset at 10kHz
- + Total Amplitude Accuracy <1.5dB
- + 10Hz Minimum Resolution Bandwidth (RBW)
- + EMI Pre-compliance Test Kit
- + 10.4 inches display



### 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.

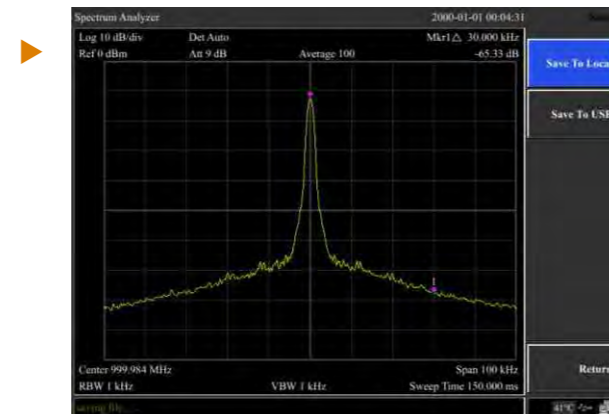
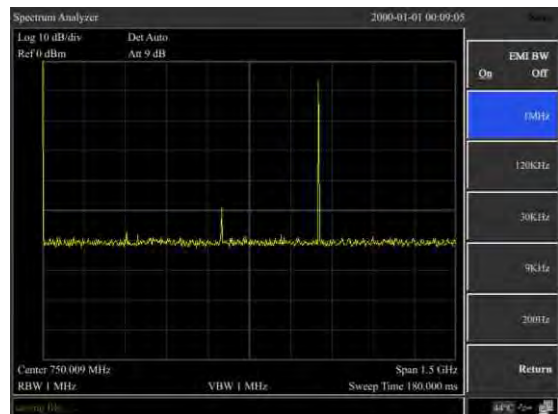


### 2. Measure -130dB small signal at 10Hz RBW

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

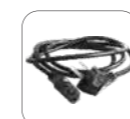
OWON offers an EMI filter and peak detector kit to help evaluating EMI levels for pre-compliance testing.

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) (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 (Tracking generator) 35 MHz-3.6 Ghz (signal generator)	100 kHz-7.5 Ghz (Tracking generator) 35 MHz-4.4 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, VGA, REF		
Display	10.4 inch TFT LCD		

Specifications subject to change without prior notice.

### + Accessories

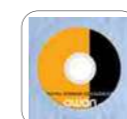
The accessories subject to final delivery.



Power Cord



USB Cable



CD-Rom



Quick Guide

### Optional Accessories



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



N-N Cable



N-SMA Cable



SMA-SMA Cable



SMA Adaptor

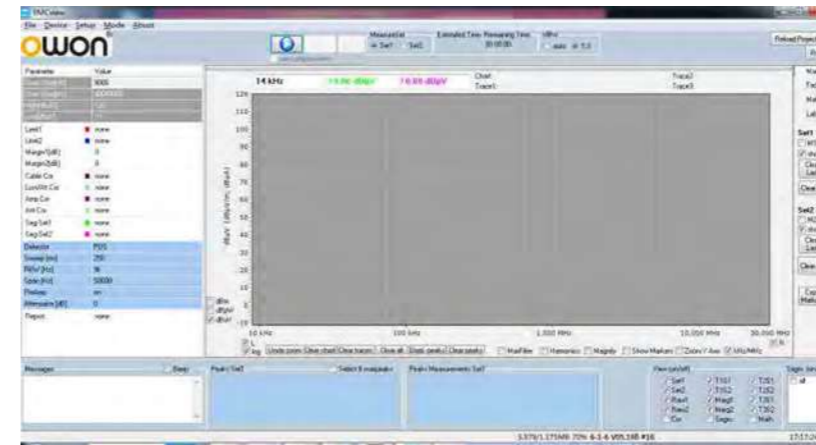


N-SMA Adaptor

## 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.

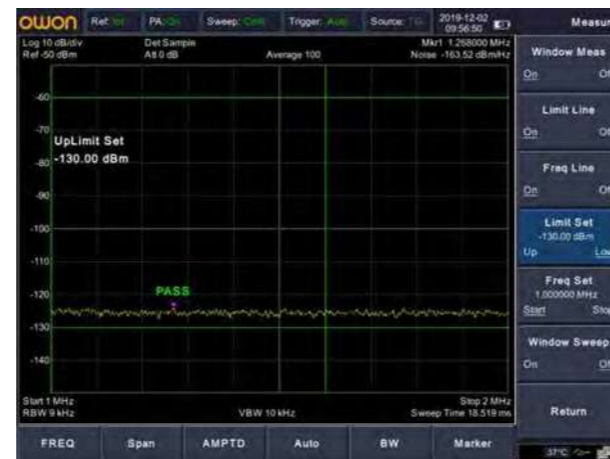


### Provides EMC test functions (requires optional software)

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.

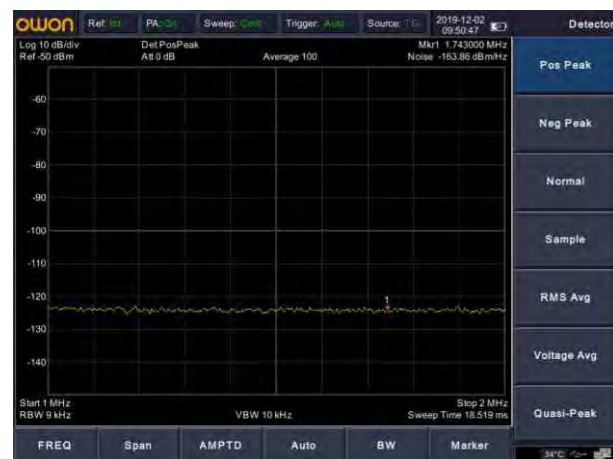


### With a Carrying case (optional), you can free your hands and make on-site work more convenient.



### Pass/Fail function

Quickly determine if the test results pass



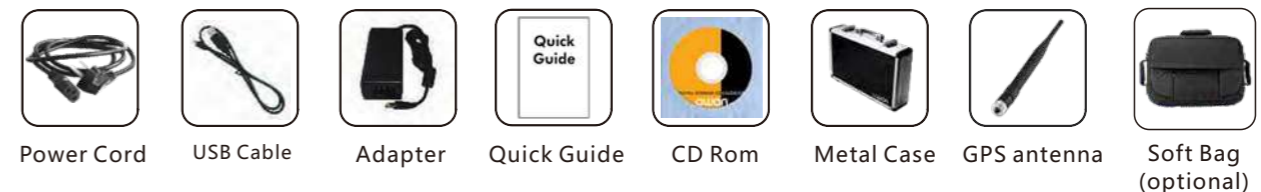
### Provides EMI pre-compliance test functions

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) 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.

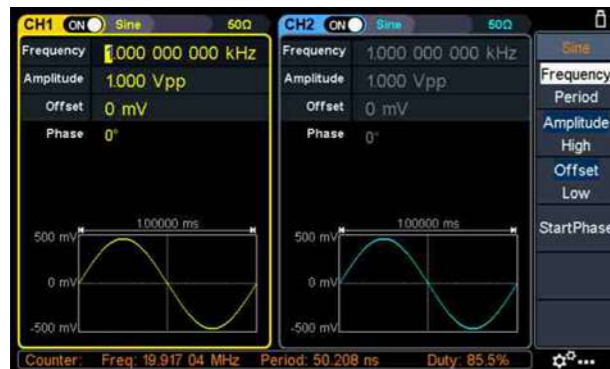


# XDG2000 Dual-channel Arbitrary Waveform Generator

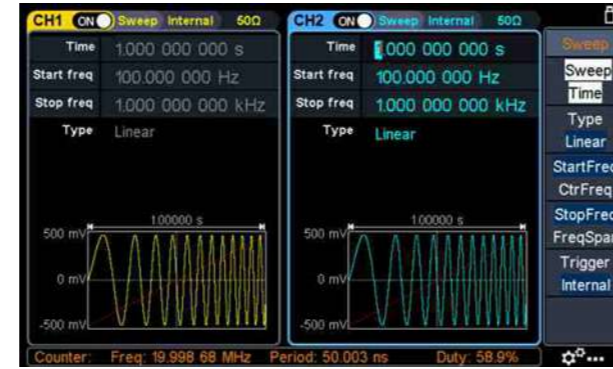


- + Max 100MHz frequency output
- + 500MSa/s Sample rate, Vertical resolution 1 $\mu$ Hz
- + 14 bits Vertical Resolution, 10Marb waveform length
- + Comprehensive waveform output : 6 basic waveforms, and 150 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, DSB-AM, FM, PM, ASK, 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 x 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			
<b>Waveform</b>				
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			
<b>Frequency (resolution 1<math>\mu</math>Hz)</b>				
Sine	1 $\mu$ z - 100MHz	1 $\mu$ z - 80MHz	1 $\mu$ z - 60MHz	1 $\mu$ z - 35MHz
Square	1 $\mu$ z - 30MHz	1 $\mu$ z - 30MHz	1 $\mu$ z - 30MHz	1 $\mu$ z - 15MHz
Pulse	1 $\mu$ z - 25MHz	1 $\mu$ z - 25MHz	1 $\mu$ z - 25MHz	1 $\mu$ z - 15MHz
Ramp	1 $\mu$ z - 3MHz	1 $\mu$ z - 3MHz	1 $\mu$ z - 3MHz	1 $\mu$ z - 3MHz
Noise (-3dB, typical)	100MHz	80MHz	60MHz	30MHz
Arbitrary Waveform	1 $\mu$ z - 15MHz	1 $\mu$ z - 15MHz	1 $\mu$ z - 15MHz	1 $\mu$ z - 15MHz
Harmonic	1 $\mu$ z - 50MHz	1 $\mu$ z - 40MHz	1 $\mu$ z - 30MHz	1 $\mu$ z - 17.5MHz
Accuracy	$\pm$ 1ppm, 25 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C			
Waveform Length	2 points - 10M points			
<b>Amplitude</b>				
into 50 $\Omega$ load	1mVpp - 10Vpp ( $\leq$ 25MHz), 1mVpp - 5Vpp ( $\leq$ 60MHz), 1mVpp - 2.5Vpp ( $\leq$ 100MHz)			
<b>Modulation</b>				
Type	AM, DSB-AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, 3FSK, 4FSK, OSK, PWM, SUM			
<b>Frequency Counter</b>				
Function	Frequency, period, +width, -width, +duty, and -duty			
Frequency Range	100mHz - 200MHz			
Frequency Resolution	7 digits			
<b>Input / Output</b>				
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)			
<b>Mechanical specifications</b>				
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

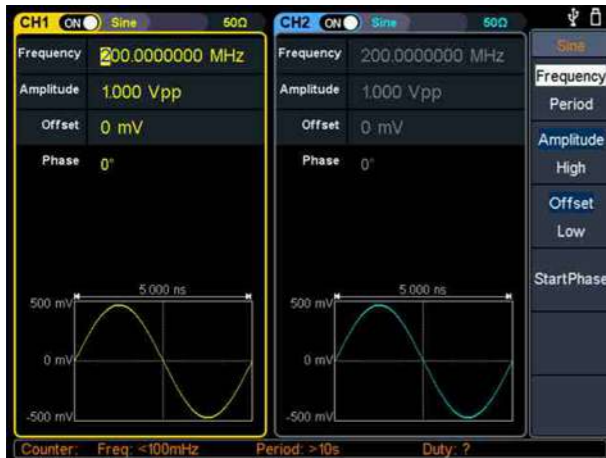
## XDG3000 Series Dual-channel Arbitrary Waveform Generator



- + 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, user-friendly operation experience



### Equal performance dual channel output



### Rich sweep function



### Rich analog and digital modulation



### Build-in 152 arbitrary waveforms

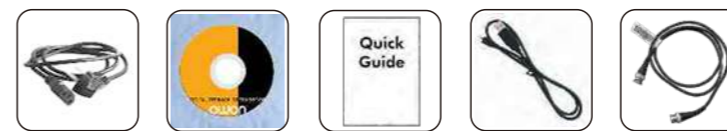


Model	XDG3252	XDG3202	XDG3162	XDG3102	XDG3082
Channel	dual				
Frequency Output	250MHz	200MHz	160MHz	100MHz	80MHz
Sample Rate	1.25GSa/s				
Vertical Resolution	14 bits				
<b>Waveform</b>					
Standard Waveform	Sine, Square, Pulse, Ramp, Noise, and Harmonic				
Arbitrary Waveform	Exponential Rise, Exponential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

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 1 $\mu$ Hz)

Sine	1 $\mu$ Hz - 5MHz		1 $\mu$ Hz - 10MHz	
Square	1 $\mu$ Hz - 5MHz			
Pulse	1 $\mu$ Hz - 5MHz			
Ramp	1 $\mu$ Hz - 1MHz			
Noise	5MHz(-3dB,type)			
Wave Length	2 - 8K pts			

### Amplitude

Amplitude	1mVpp-12.5 Vpp (50 $\Omega$ ), 1mVpp-25 Vpp (high impedance)			
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### 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 1 $\mu$ Hz)

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

### Amplitude

Amplitude	10mVpp-10 Vpp (50 $\Omega$ ),10mVpp-20 Vpp (high impedance)			
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### 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 x 110 x 295 (mm)			
Device Weight	3kg			

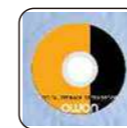
Specifications subject to change without prior notice.

### + Accessories

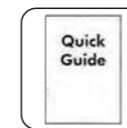
The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



USB Cable



Q9 Cable

## 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 pixel) LCD

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)			
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### 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
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Specifications subject to change without prior notice.

### + Accessories

The accessories subject to final delivery.



Power Cord



CD Rom



Quick Guide



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	
<b>General</b>		
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

● Trigger

No.	Function	Reading
63	DCV	6.966 V
64	DCV	6.966 V
65	DCV	6.966 V
66	DCV	3.747 V
67	DCV	3.747 V
68	DCV	3.747 V
69	DCV	1.822 V
70	DCV	1.821 V
71	DCV	1.821 V

-000.54 mVDC

Auto 200 mV

● Trigger

000.23 mVDC

Auto 200 mV

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	60.0000 mA-10.0000 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	Measurement Range	Test Current	Accuracy: 1 Year ± (% of reading + % of range)
Capacitance	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

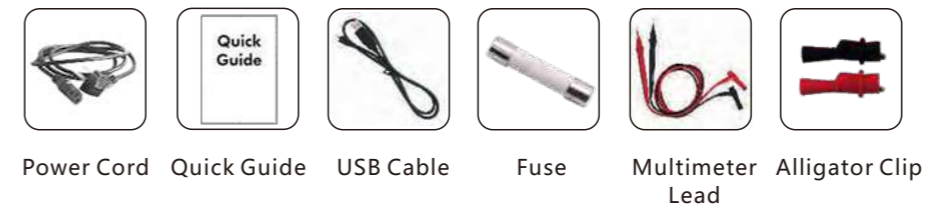
Data-logger Function	
Logging Duration	5ms -1000s
Logging Length	1M points

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.



Power Cord   Quick Guide   USB Cable   Fuse   Multimeter Lead   Alligator Clip



## OW Series 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 analyse the data
- + Support NCV non-contact voltage sense
- + True RMS test supported
- + Built-in offline recording function
- + Widely supported on Android, iOS and Windows

### NCV (Non-Contact Voltage) Sensor

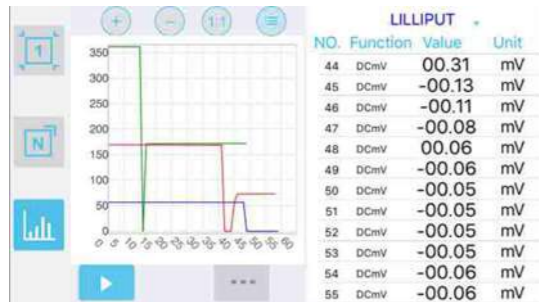
When the non-contact voltage sensor is placed near to a live conductor, the instrument will beep and flash the row of LEDs at the top of the display depending on the AC voltage strength.

### on-site temperature test



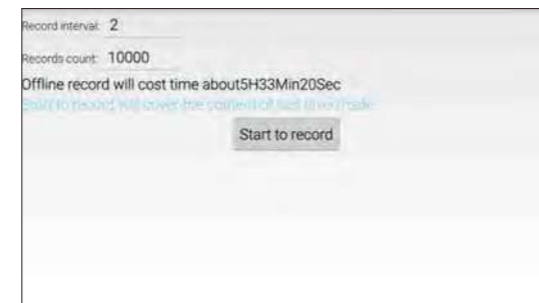
### functioning as multimeter + datalogger

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



### 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 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) 1000V CATIII (OW18A,OW18B)
Flashlight	OW18A, OW18B		
Low-battery Indicator	√	NCV	√
Data Hold	√	Dimension (W / H / D)	147mm x 74mm x 49mm (OW16A, OW16B) 190mm x 90mm x 56mm (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 multimeter

	OW18D/E Measurement Range	Accuracy
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)
	20.000kΩ/200.00kΩ/2.0000MΩ	±(0.3%+1dig)
	20.000MΩ	±(0.5%+1dig)
Capacitance	200.00MΩ	±(5.0%+10dig)
	2.0000nF/20.000nF/200.00nF/2.0000μ/20.000μ 200.00μ/2.0000mF/20.000mF	±(3.0%+10dig)
Frequency	200.00Hz/2.0000kHz 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 °C ~ 400°C(0.1°C)	±(1.0%+3°C)
	-58 °F ~ 752 °F(0.1°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-type Thermocouple



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



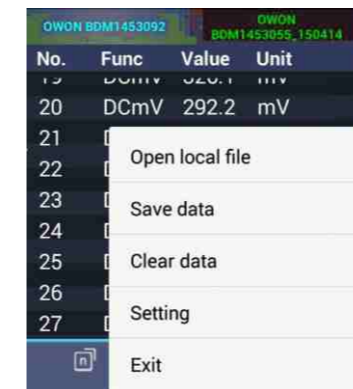
### remote control supported

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 600.0V/1000V	400.0mV/4.000V/40.00V/400.0V 1000V	±(0.5%+2dig)
AC Voltage	60.00mV/600.0mV/6.000V/60.00V 600.0V/750V	4.000V/40.00V/ 400.0V/750V	±(0.8%+2dig)
DC Current	600.0A/6.000mA/60.00mA/600.0mA 6.000A/ 20.00A	400.0µA/4000µA/40.00mA/400.0mA 4.000A/10.00A	±(0.8%+2dig)
AC Current	600.0µA/6.000mA/60.00mA/600.0mA 6.000A/20.00A	400.0µA/4000µA/40.00mA/400.0mA 4.000A/10.00A	±(0.8%+2dig)
Resistance	600.0Ω/6.000kΩ/60.00kΩ/600.0kΩ 6.000MΩ/10.00MΩ	400.0Ω/4.000kΩ/40.00kΩ/400.0kΩ 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 99.99kHz/999.9kHz/ 9.999MHz	4.999Hz/49.99Hz/499.9Hz/4.999kHz z49.99kHz/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), (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 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

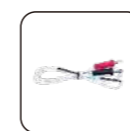
Specifications subject to change without prior notice.

### + 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 Channel Linear DC Power Supply



- + Small case
- + 180W maximum output power
- + High resolution: 1mV / 1mA (P4000 series), 10mV / 10mA (SP series)
- + Low ripple/noise
- + Over voltage/over current protection
- + 3.7 inch TFT LCD display
- + Supports RS232 digital communication

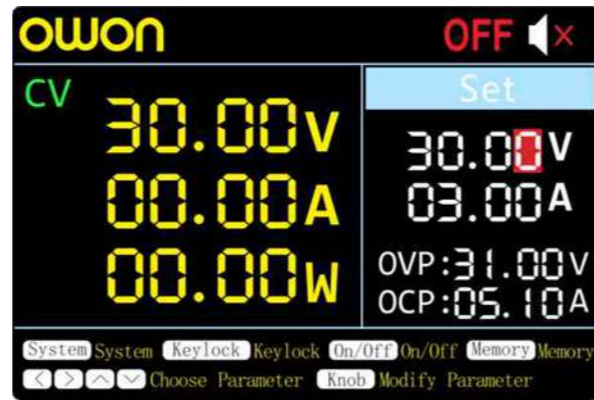
### Large LCD Display



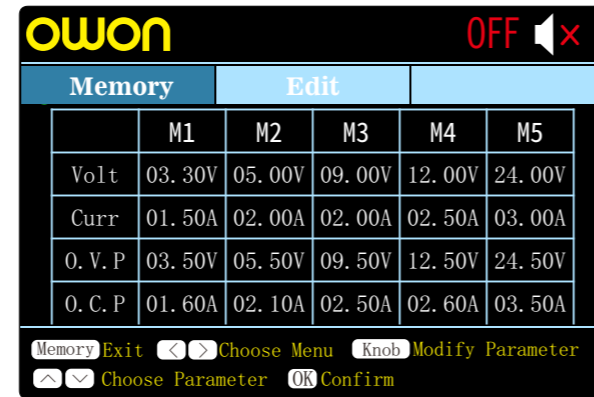
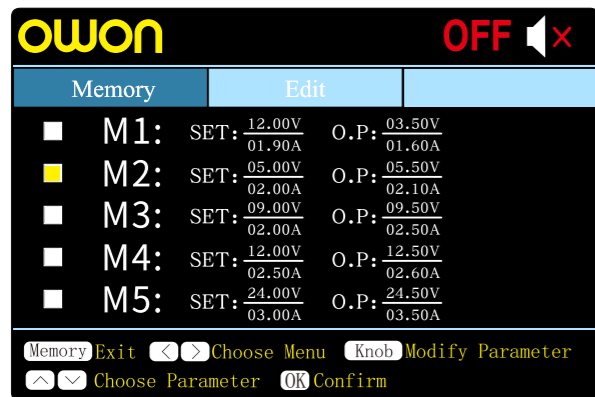
Conventional display example\*



### 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 + one 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	180W	105W
Channel Output	0 - 30V / 0 - 5A * 1-CH		0 - 60V / 0 - 3A * 1-CH	0 - 30V / 0 - 3A * 1-CH 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

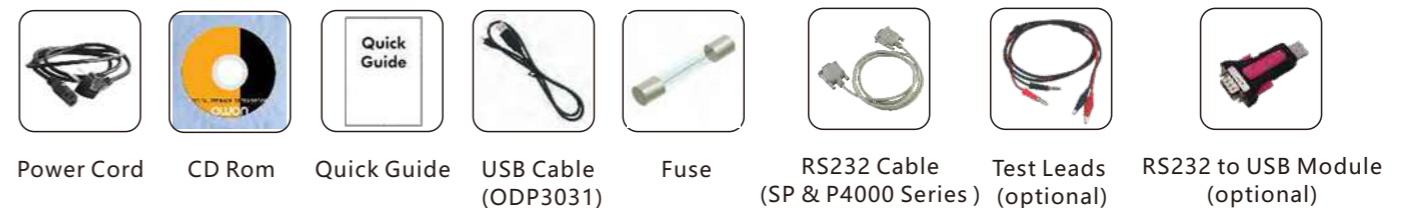
The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment.

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.



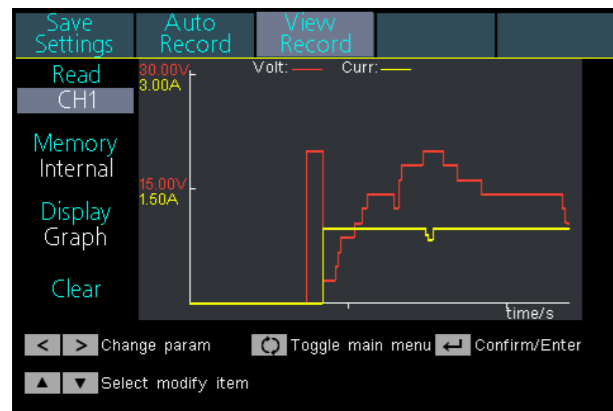
## ODP Series Dual Channel Programmable DC Power Supply



- + 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, displaying recorded data in a chart.



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

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.



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 , 0 - 6V /0- 3A	0 - 60V /0- 6A, 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	

## ODP Series Triple Channel Programmable DC Power Supply

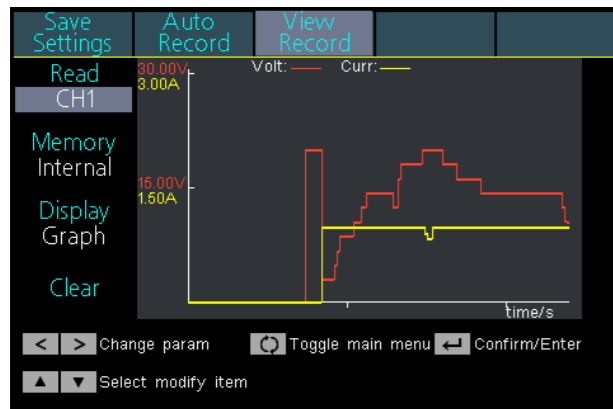


max  
**378W**  
power output

- + 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, displaying recorded data in a chart.



NO.	Volt	Curr	Power
61	8.708	1.998	17.395
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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

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	Channel	ODP3033		ODP3053		ODP3063		ODP6033		
		CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH3
Output Ratings (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 (25°C ± 5°C) (within 12 months)	Voltage	≤0.03%+10mV								
	Current	≤0.1%+8mA								≤0.1%+5mA
Read Back Accuracy (25°C ± 5°C)	Voltage	≤0.03%+10mV								
	Current	≤0.1%+8mA								≤0.1%+5mA
Noise and Ripple (20Hz - 20MHz)	Voltage(Vp-p)	≤2mVp-p								
	Voltage(rms)	≤300µVrms								
	Current(rms)	≤3mArms								≤4mArms
Output Temperature Coefficient (0°C-40°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								
Programmable Output	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.



## Differential Probes



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 1.4KV@1/100	7000V@1/1000 700V@1/100	1500V@1/1000 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 Probes



Model	CP-05+			
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 ≤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 Probes



Model	OH5040	OH5018	Model	OH5007
Max.Working Voltage	DC+AC(peak)40KVCATII AC(rms): 27KVCATII	DC+AC(peak)18KVCATII AC(rms): 12KVCATII	Max.Working Voltage	DC: 0-10KV 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) AC:±3%(1KHz/1KV/1KHzRMS) -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 x80P (cylindrical)
Operation Temp	-10 ~ 55°C		Device Weight	250g
Dimension	80(W)x80(H)x320(L)mm			
Device Weight	460g			



Model	CP-07+			
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)	AC Current	Range	ACA 400mA    ACA 4A
Auto Zero at Power-on	√		Accuracy	±2.0%rdg±5d
Power Supply	9V 6F22 Battery		Sensitivity	1mV/1mA    1mV/10mA
Operating Temperature	0°C to 40°C ≤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 Probes



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 Probes

	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 10X: 14.5pF -17.5pF	1X: 85pF -115pF 10X: 14.5pF -17.5pF
Max Input Voltage	1X: <200V 10X: <600V	1X: <200V 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 Probes

	Model		
	P4060	P4100	P4250
Attenuation Ratio	100X	100X	100X
Bandwidth	60MHz	100MHz	250MHz
Input R	100MΩ	250MΩ	250MΩ
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 10X: 14.5pF -17.5pF	1X: 85pF -115pF 10X: 14.5pF -17.5pF	1X: 85pF -115pF 10X: 14.5pF -17.5pF	1X: 85pF -115pF 10X: 14.5pF -17.5pF
Max Input Voltage	1X: <200V 10X: <600V	1X: <200V 10X: <600V	1X: <200V 10X: <600V	1X: <200V 10X: <600V

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

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

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