Digital Oscilloscopes

owon®

+ Meeting your needs
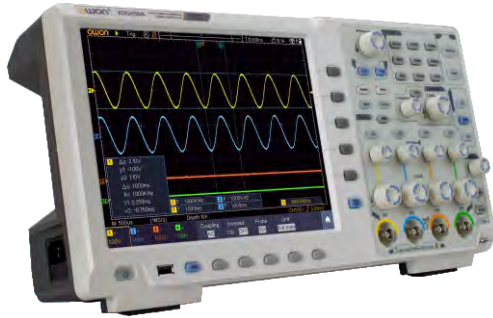
Multi-function test oscilloscope
- XDS4000 Series

+ Including 7 measurement functions in one: oscilloscope, waveform generator, multimeter, FFT spectrum analyzer, frequency counter, protocol analysis, amplitude-frequency curve analysis
+ 350 MHz / 500 MHz oscilloscope bandwidth, 5 GSa/s sample rate
+ Standard 400 Mpts memory depth
+ 600,000 wfms/s refresh rate, easy to capture exceptional and low probability events
+ Advanced function calculation function
+ Standard 50MHz single-channel arbitrary waveform generator
+ The oscilloscope captures the waveform, the waveform generator generates the waveform, help engineers to further analyze the circuit
+ Waveform cloning function, quickly generate captured waveforms
+ A variety of triggers and bus decodes
+ Optional multimeter and multimeter data logger function
+ Standard Bode plot for loop test analysis
+ Multi-interface design: USB Host & Device, LAN, VGA; supports standard SCPI communication, USB Device supports USB TMC
+ 10.4-inch multi-touch screen

1. multi-level grayscale, and color temperature display
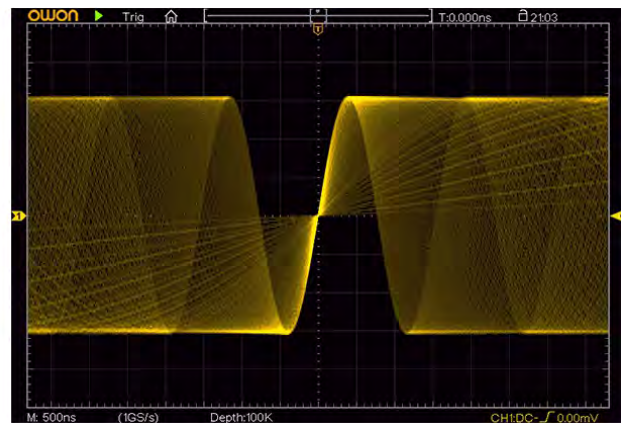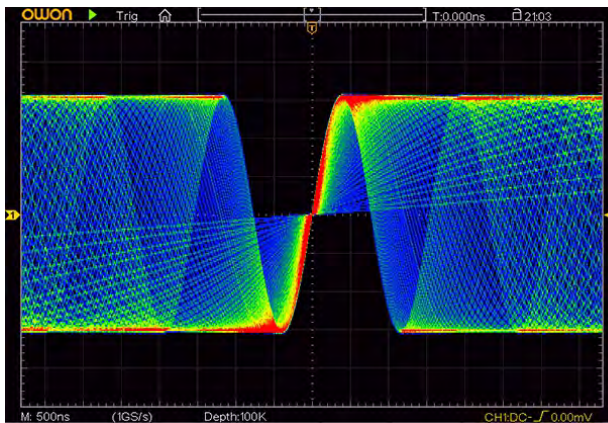
2. Standard 400 Mpts memory depth, observe more waveform details

M Length
1k
10k
100k
1M
10M
100M
200M
400M

3. Built-in 6-digit high-precision frequency counter, support the statistics on the max. and min. values

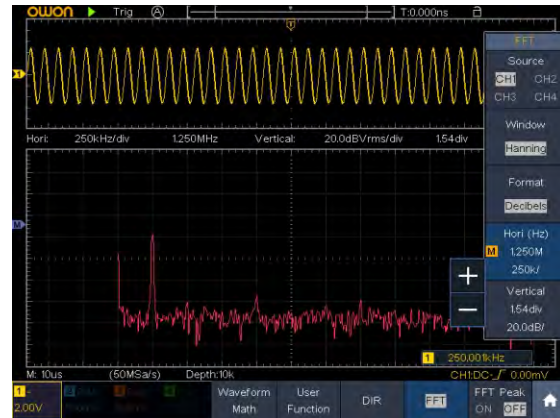| ScreenMeasure	Max	Min
1 F : 10.01MHz	10.20MHz	9.986MHz

4. **Standard 50MHz single-channel waveform generator, 250 MSa/s sample rate, 16k arbitrary waveform length, built-in 64 pre-defined waveforms**
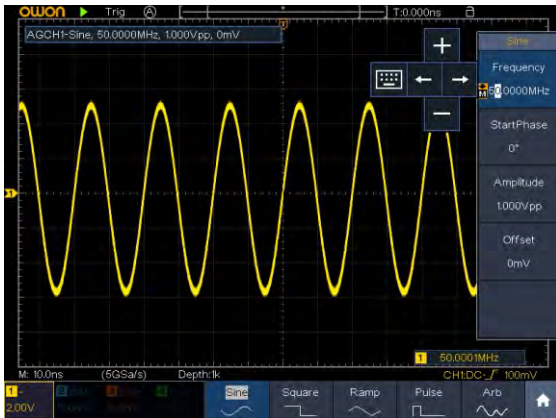

5. **Standard FFT, real-time operation of waveform data**

Support 4 FFT windows: Rectangular, Hamming, Hanning and Black-harris

6. **4 ½ Digits Multimeter with Data Logging Function (option)**

Support voltage, current, capacitance, resistance, frequency, duty cycle, continuity, diode test, and built-in data logging function, can analyze the change trend of the measured object for a long time.
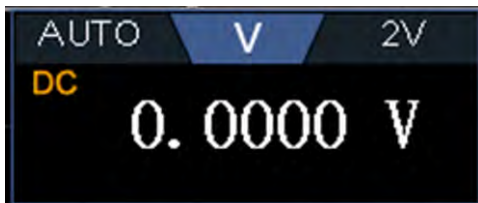
7. **A variety of triggers and decodes (optional)**

A variety of triggers supported - Logic, Runt, Windows, Time-out, I2C, SPI, RS232/UART, Nth Edge, and CAN.
Support I2C, SPI, RS232/UART, CAN serial bus decoding function.

8. **Frequency Characteristic Curve**

XDS4000 series can generate the sweep signal of the specified range by controlling the built-in signal generator module and output the signal to the switch power supply to carry out loop analysis test. The bode plot generated from the test can display the gain and phase variations of the system under different frequencies, enabling engineers to get a clear view about data from the bode plot.
By analyzing the phase margin (PM) and gain margin (GM), they can judge whether the system is stable.

9. 10.4-inch LCD, clear waveform display, the multi-touch screen allows engineers to work more efficiently.

10. The data logger can record the data measured by the multimeter in the internal memory or external U disk, and can generate charts or CSV format for further analysis.

Model	XDS4352	XDS4502	XDS4354	XDS4504
Bandwidth	350MHz	500MHz	350MHz	500MHz
Sample Rate	5GS/s			
Horizontal Scale (s/div)	500ps/div - 1000s/div, step by 1 - 2 - 5			
Channel	2		4	
Display	10.4 inch LCD touch screen			
Record length	400M			
Waveform Refresh Rate	max 600,000 wfms/s			
Vertical Sensitivit	1MΩ:1mV/div~ 10V/div;50Ω: 1mV/div ~ 1V/div			
Vertical Resolution (A/D)	8bits			
Input impedance	1MΩ±2%, in parallel with 15pF±5pF;50Ω±2%			
Input coupling	DC, AC, Ground			
Trigger type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, RS232, CAN			
Decoding Type (optional)	RS232, I^{2}C, SPI, CAN			
Automatic measurement	Period, Frequency, Mean, PK-PK, RMS, Max, Min, Top, Base, Amplitude, Overshoot, Preshoot, Rise Time, Fall Time, +Pulse Width, -Pulse Width, +Duty Cycle, -Duty Cycle, Delay A→B ⌐, Delay A→B ⌐, Cycle RMS, Cursor RMS, Screen Duty, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase A→B ⌐,Phase A→B ⌐, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count, Area, and Cycle Area.			
Waveform math	+, −, *, / ,FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)			
Waveform storage	100 waveforms			
Communication interface	USB Host, USB Device; Trig Out(Pass/Fail); LAN port; VGA port; EXT Trig In			
Printer compatibility	PictBridge			
Dimension (WxHxD)	422x226x135(mm)			
Weight	Approx. 5 kg (without accessories)			

Arb Waveform Generator Specifications

Max Frequency Output	50MHz
Sample Rate	250MS/s
Channel	1 channel
Vertical Resolution	14bits
Amplitude Range	2mVpp - 5Vpp (≦50MHz); 2mVpp - 20Vpp (≦50MHz)
Waveform Length	16K
Output Waveformsa	Sine, Square, Pulse, Ramp, Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, Noise, and others, total 46 built-in waveforms, and user-defined arbitrary waveform

Multimeter Specifications (optional)

Full Scale	4½ digits	**Auto Range**	√
Measure	Voltage, Current, Capacitance, Resistance, Frequency, Duty cycle, Diode test		
Capacitance	2nF – 20mF: ±(4%±10digit)		
Voltage	DCV: 20mV,200mV: ±(0.5%±10digit), 2V, 20V, 200V: ±(0.3%±5digit),1000V:±(0.5%±5digit) ACV: 200mV, 2V, 20V, 200V: ±(0.8%±10digit) 750V: ±(1%±10digit) frequency: 40Hz-1000Hz		
Current	DCA: 20A: ±(2%±10digit) ; ACA: 20A: ±(2.5%±10digit)		
Impedance	200Ω~2MΩ: ±(0.8%±10digit),20MΩ: ±(1%±10digit) 100MΩ: ±(5%±10digit)		

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	Q9 Cable

optional accessories:

Multimeter Lead	Current Ext Module

owon

Multi-function test oscilloscope
- XDS3000 Series

CE

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

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

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

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).**
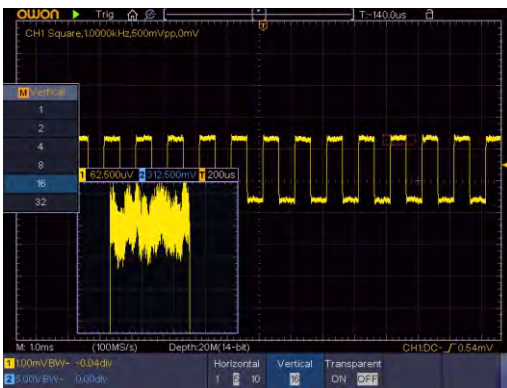
2. **multi-level grayscale, and color temperature display**
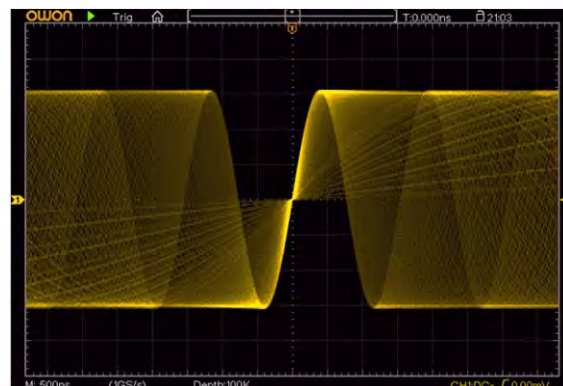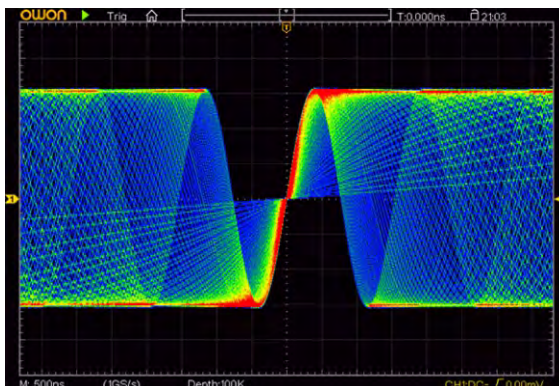
3. Xvisual platform - restore the waveform detail fully
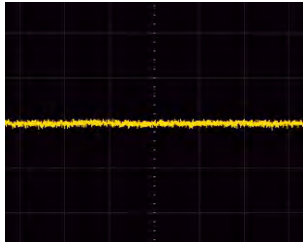
low background noise

40M record length
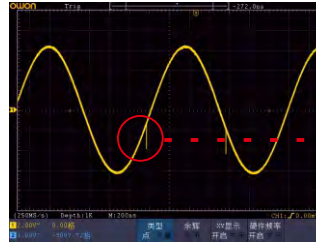
and 75,000 wfms/s refresh rate, easily capturing exceptional, and low probability events

4. multi-trigger supported - Logic, Time-out, I²C, SPI, RS232/UART, Runt, Windows, Nth Edge, and CAN

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

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

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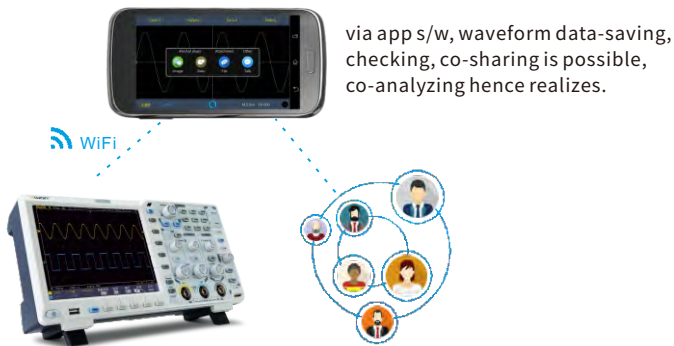
via app s/w, waveform data-saving, checking, co-sharing is possible, co-analyzing hence realizes.

WiFi

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).

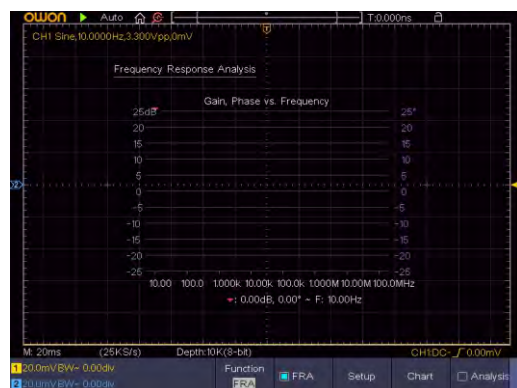| Model	XDS3062A	XDS3102A	XDS3102AP*	XDS3202A*	XDS3102	XDS3202E	XDS3202*	XDS3302*
Bandwidth	60MHz	100MHz	100MHz	200MHz	100MHz	200MHz		300MHz
Channel	2+1 (external)							
Sample Rate	1GS/s				1GS/s		2GS/s	2.5GS/s
Vertical Resolution (A/D)	12 bits		14 bits		8bits			
Record length	40M							
Waveform Refresh Rate	max 75,000 wfms/s							
Horizontal Scale (s/div)	2ns/div - 1000		1ns/div - 1000		2ns/div - 1000		1ns/div - 1000	
	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 /	±1ppm (type, Ta=+25℃)							
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, and RS232							
Trigger Type (optional)	CAN							
Bus Decoding(optional)	I2C, SPI, RS232/UART, and 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⎚, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count							
Communication Interface	USB host, USB device, USB port for PictBridge, Trig Out (P/F), LAN, and VGA (optional)							
Frequency Counter	available							
Power Supply	100V - 240V AC, 50/60Hz, CAT II							
Power	＜15W		＜24W		＜15W		＜24W	
Fuse	2A, T class, 250V							
Dimension (W x H x D)	340 x 177 x 90 mm							
Weight	Approx. 2.60 kg							

+ Optional Module / Function

VGA	VGA + AV port		RS232/UART	RS232/UART
WIF	Wi-Fi		SPI	SPI
AWG	arb waveform generator		I2C	I^{2}C
DMM	digital multimeter		CAN	CAN decoding
TOU	Touch screen (capacitor-type)			
BAT	3.7V, 13200mAh			

Arb Waveform Generator (optional) Specifications

Max Frequency Output	25MHz
Sample Rate	125MS/s
Channel	1 channel(apply to XDS2104(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	max 45,000 wfms/s				max 70,000 wfms/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℃)							
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	+, −, ×, ÷, 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 Edge Count, Area, Cycle Area							
Communication Interface	USB host, USB device, Trig Out (P/F), LAN, and VGA (optional)							
Frequency Counter	available							
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)	340 x 177 x 90 mm							
Weight	Approx. 2.60 kg							

Multimeter (optional) Specifications

Full Scale Reading	3¾ digits (max 4000 count)	Diode	0V -1V
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.

Power Cord

CD Rom

Quick Guide

USB Cable

Probe

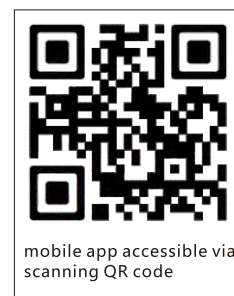Probe Adjust

optional accessories:

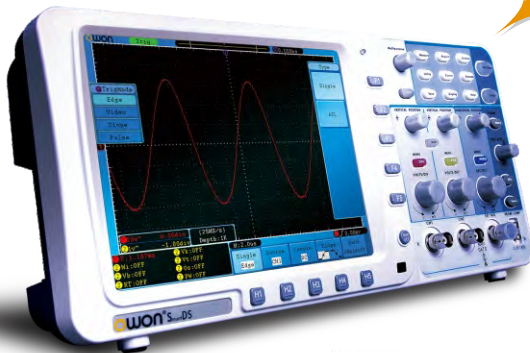Multimeter Lead

Q9

Capacitance Ext Module

Battery

Soft Bag

mobile app accessible via scanning QR code

OWON

Deep Memory Digital Storage Oscilloscope
- SDS Series

10M
Record Length

+ Bandwidth: 100MHz - 300MHz with dual-channel
+ Sample rate: 1GS/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

VGA LAN USB WAVE RECORD FFT

CE

Model	SDS7102	SDS7202	SDS8102	SDS8202	SDS8302	SDS9302
Bandwidth	100MHz	200MHz	100MHz	200MHz	300MHz	
Channel	2+1 (external)					
Sample Rate	1GS/s		2GS/s		2.5GS/s	3.2GS/s
Horizontal Scale (s/div)	2ns/div - 100s/div, step by 1 - 2 - 5		1ns/div - 100s/div, step by 1 - 2 - 5			
Rise Time	≤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, Week 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	100kA/V - 1KA/V					
Communication Interface	USB host, USB device, Pass / Fail, LAN, VGA (optional), or RS232 (optional)					
Battery (optional)	7.4V, 8000mA					
Dimension (W x H x D)	340 x 155 x 70 mm					
Weight	Approx. 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)

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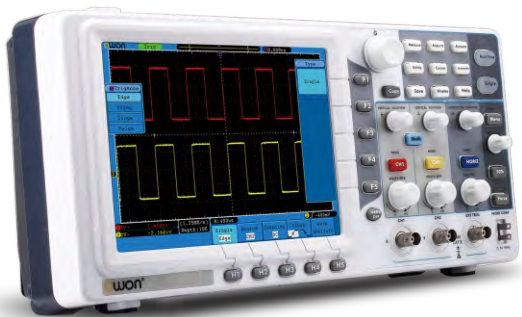
+ Bandwidth: 30MHz - 125MHz
+ Sample rate: 500MS/s - 1GS/s
+ Ultra-thin body
+ 8 inch high resolution LCD
+ Pass / Fail function
+ SCPI, and LabVIEW supported
+ newly added function - digital filtering, and current measurement (excl. SDS5032E and SDS5052E)

CE

VGA   LAN   USB   WAVE RECORD   FFT

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					
Display	8" color LCD, 800 x 600 pixels					
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF		1MΩ ± 2%, in parallel with 15pF±3pF			
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, Week 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, VGA (optional), or RS232 (optional)					
Dimension (W x H x D)	348 x 170 x 78 mm					
Weight	Approx. 1.50 kg					

Specifications subject to change without prior notice.

+ **Accessories**   The accessories subject to final delivery.

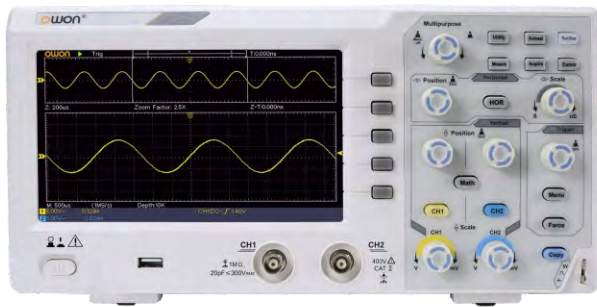Power Cord   CD Rom   Quick Guide   USB Cable   Probe   Probe Adjust   Soft Bag (optional)

owon

Super-economical Type Digital Storage Oscilloscope
- SDS1000 Series

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

CE

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 - 1000s/div, step by 1 - 2 - 5	2ns/div - 1000s/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	Approx. 1.10 kg			

Specifications subject to change without prior notice.

+ **Accessories**   The accessories subject to final delivery.

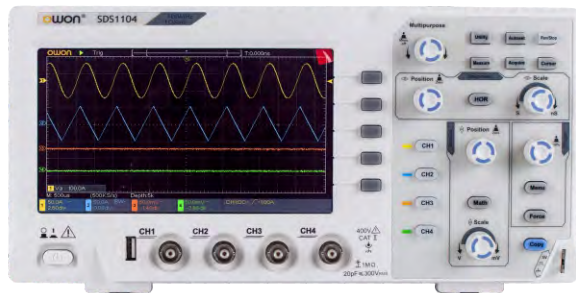| Power Cord | CD Rom | Quick Guide | USB Cable | Probe | Probe Adjust | Soft Bag (optional) |

Super-economical Type Digital Storage Oscilloscope
- SDS1000 Series

+ Bandwidth: 100MHz
+ 4-Channel
+ Sample rate: 1GS/s
+ Ultra-thin body
+ 7 inch high resolution LCD
+ SCPI, and LabVIEW supported

CE

Model	SDS1104
Bandwidth	100MHz
Channel	4
Sample Rate	1GS/s
Horizontal Scale (s/div)	2ns/div - 1000s/div, step by 1 - 2 - 5
Display	7" color LCD, 800 x 480 pixels
Input Impedance	1MΩ ± 2%, in parallel with 20pF±15pF
Record Length	20K
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↳, area, cycle area, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF
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	Approx. 1.10 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) |

Oscilloscope
- AS Series

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

CE

Model		AS101	AS201
Bandwidth		DC:0 - 10MHz, AC: 10 Hz - 10MHz	DC:0 - 20MHz, AC: 10 Hz - 20MHz
Channel		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)	
Horizontal system	Sample Rate	100MS/s	
	Interpolation	(Sinx)/x	
	Scanning speed (S/DIV)	0.05us/DIV - 0.1s/DIV,step by 1 – 2 - 5	
	relay time accuracy	±100 ppm	
	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	
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 MΩ±2%, 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	＜15W	
	Fuse	1A, T class, 250V	
	Dimension (W x H x D)	117 x 192 x 288 mm	
	Device Weight	Approx. 1.8 kg	

Specifications subject to change without prior notice.

+ **Accessories**   The accessories subject to final delivery.

Power Cord   Quick Guide   Probe   Probe Adjust

PC Oscilloscope
- VDS Series

+ 20MHz bandwidth,100MS/s sample rate
+ Friendly UI : FFT, or X-Y, and waveform 2 views displayed on the same screen
+ Multi-trigger option : edge, video,slope, and pulse
+ USB isolation - less signal interference, more PC protection
+ USB bus powering
+ Ultra-thin body design, easy portability

$C\,E$

Model	VDS1022I	VDS1022
Bandwidth	25MHz	
Channel	2 channel + multi	
Sample Rate	100MS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5	
Record Length	5K	
Input Impedance	$1M\Omega \pm 2\%$, in parallel with $10pF\pm5pF$	
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, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, Delay A→B, Delay A→B	
Waveform Math	$+, -, \times, \div$, FFT	
Communication Interface	USB2.0 (isolation)	USB2.0
Power Supply	≤2.5W	
Dimension (W x H x D)	170 x 18 x 120 mm	
Weight	Approx. 0.26 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 | Quick Guide |

owon

PC Oscilloscope
- VDS6000 Series

+ Dual/four channel, ultra-thin body design
+ 100MHz bandwidth, and max. 1GSa/s real-time sampling rate
+ Standard built-in 5MHz signal generator (for dual-CH)
+ 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	2 channel + signal generator	
Sample Rate	1GS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2 - 5	
Record Length	10M	
Input Impedance	1MΩ ± 2%, in parallel with 15pF±5pF	
Sample Rate / Relay Time Accuracy	±25ppm	
Max Input Voltage	40V(DC + AC peak)	
Vertical Sensitivity	2mV/div - 5V/div	
Vertical Resolution	8 bits	8 bits / 12 bits / 14 bits
Trigger Type	Edge, Pulse, Video, Slope	
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Delay A→B, Delay A→B	
Secondary Development	Supported on Windows, Linux, Android, and iOS platform	
Built-in Signal Generator	Support	
Communication Interface	USB(Type-C), LAN, Wi-Fi (optional)	
Power Supply	≤8W	
Dimension (W x H x D)	190 x 18 x 120 mm	
Weight	Approx. 0.38 kg	

Specifications subject to change without prior notice.

+ Accessories   The accessories subject to final delivery.

| Probe | Probe Adjust | USB Cable | Silicon Gel Case | Quick Guide | Adapter | Power Cord | Q9 (for dual-CH) | Wi-Fi (optional) |

owon

PC Oscilloscope
- VDS6000 Series

VDS 6104
4 CH PC-Based Oscilloscope

CE

+ 4 channels ultra thin design
+ 7OMHz - 100MHz bandwidth, and 1GS/s real-time sample rate
+ Max 1OM record length, max 14 bits high resolution ADC
+ SCPI、LABVIEW supported
+ Support the secondary development of windows / Linux/Android / iOS platform
+ USB type-C power supply, faster data transmission, support 5-15V wide voltage power supply
+ Wi-Fi unlimited transmission, more convenient to use. (Wi-Fi accessories are required)
+ Support software for Windows and Mac OS

Model	VDS6074	VDS6104	VDS6074A	VDS6104A
Bandwidth	70MHz	100MHz	70MHz	100MHz
Channel	4 channel			
Sample Rate	1GS/s			
Horizontal Scale (s/div)	1ns/div - 100s/div, step by 1 - 2 - 5			
Record Length	10M			
Input Impedance	1MΩ ± 2%, in parallel with 15pF±5pF			
Sample Rate / Relay Time Accuracy	±25ppm			
Max Input Voltage	40V(DC + AC peak)			
Vertical Sensitivity	2mV/div - 5V/div			
Vertical Resolution	8 bits		8 bits / 12 bits / 14 bits	
Trigger Type	Edge, Pulse, Video, Slope			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Preshoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Delay A→B⌐, Delay A→B⌐			
Secondary Development	Supported on Windows, Linux, Android, and iOS platform			
Built-in Signal Generator	Support			
Communication Interface	USB Device(Type-C), USB Host, LAN, Wi-Fi (optional)			
Power Supply	≤8W			
Dimension (W x H x D)	190 x 18 x 120 mm			
Weight	Approx. 0.40 kg			

Specifications subject to change without prior notice.

+ Accessories
The accessories subject to final delivery.

| Probe | Probe Adjust | USB Cable | Silicon Gel Case | Quick Guide | Adapter | Power Cord | Q9 (for dual-CH) | Wi-Fi (optional) |

2CH / 4CH Tablet Digital Storage Oscilloscope
- TAO3000 Series

+ Oscilloscope + Multimeter(2CH type)
+ Max 120MHz Bandwidth, 1GS/s sample rate
+ 14-bit high resolution ADC
+ 40M record length; 45,000 wfms/s waveform refresh rate
+ low back ground noise
+ 8-inch 800 x 600 high resolution LCD, multi-touch screen, more user-friendly operation experience
+ SCPI and LabVIEW supported
+ multi- trigger, and bus decoding function
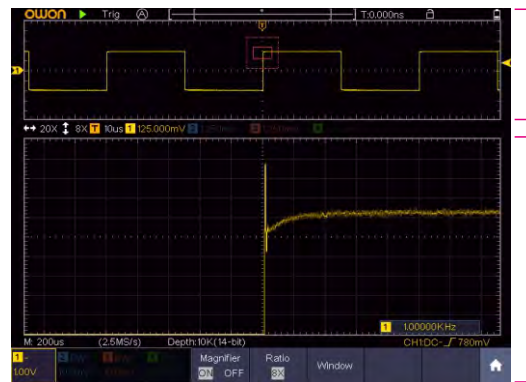+ multi-interface integration - USB host, USB device, LAN, Wi-Fi (optional)

CE

14-bit hardware ADC, high measurement accuracy

Equipped with 14-bit high-resolution hardware ADC, the precision is 64 times against other oscilloscope on market.
You can observe the waveform details more clearly, and measure the changes of small voltage signals more accurately.

Original view

Magnifier view

Magnifier view of 8 bits sampling   Magnifier view of 14 bits sampling

Excellent oscilloscope performance, low background noise, high storage, high refresh

Low background noise allows the oscilloscope to have better small signal measurement capabilities.
High storage allows the oscilloscope to acquire longer signals. High refresh rate allows the oscilloscope
to capture waveform details and exceptional events.
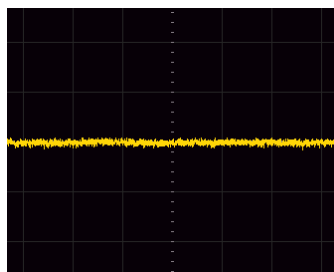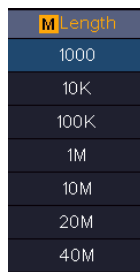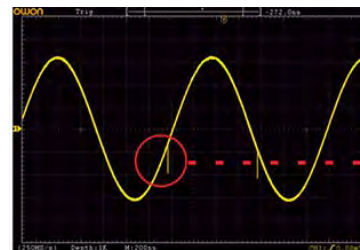
Low background noise   40M record length   45000 wfms/s refresh rate, easily capturing exceptional, and low probability events

Multi-level grayscale, and color temperature display

Multiple trigger and bus decoding function

M Bus Type
RS232
I2C
SPI
CAN

Serial bus coding available in I2C, SPI, RS232/UART, and CAN.

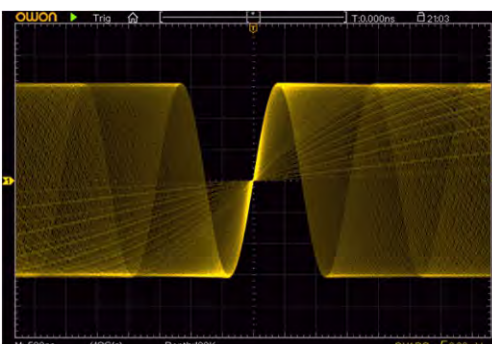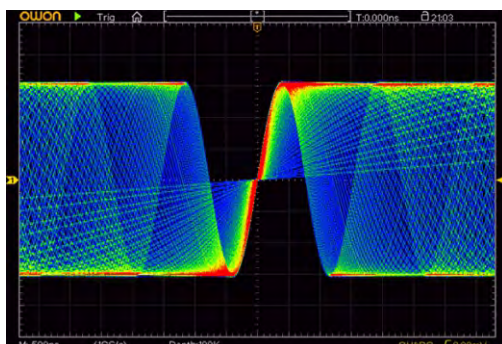| M Single |
| --- |
| Edge |
| Video |
| Pulse |
| Slope |
| Runt |
| Windows |
| Timeout |
| Nth Edge |

Support multiple trigger modes, including Edge, Video, Pulse, Slope, Runt, Windows, Timeout, I2C, SPI, RS232/UART, CAN, and Nth Edge.

Multiple waveform math operations

Support +, -, *, /, FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)

Built-in Wi-Fi module

Built in Wi-Fi module, the user can connect with TAO3000 through mobile device, realize the same screen display and control, store and view waveform data through app, share with friends, realize collaborative analysis and successfully complete the work.

Multiple operation methods, make field testing more convenient

Handheld Type
The back is equipped with anti falling elastic belt.

Bracket Type
With bracket, it can be placed on the table

Knapsack Type
Optional outdoor Backpack

Model	TAO3072	TAO3102	TAO3122	TAO3072A	TAO3102A	TAO3122A
Bandwidth	70MHz	100MHz	120MHz	70MHz	100MHz	120MHz
Sample Rate	1GS/s					
Vertical Resolution (A/D))	8 bits			8 bits/12 bits/14 bits		
Record length	40M					
Waveform Refresh Rate	45,000 wfms/s					
Horizontal Scale (s/div))	2ns/div - 1000s/div, step by 1 - 2 - 5					
Channel	2					
Display	8" color LCD, 800 x 600 pixels display, multi-touch screen					
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF					
Max Input Voltage	1MΩ ≤ 300Vrms;					
Probe Attenuation Factor	0.001X - 1000X, step by 1 - 2 - 5					
Sample Rate / Relay Time Accuracy	±10 ppm max (Ta = +25℃)					
Input Coupling	DC, AC, GND					
Vertical Sensitivity	1mV/div - 10V/div (at input)					
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I²C, SPI, RS232/UART, and CAN (optional)					
Bus Decoding(optional)	I²C, SPI, RS232/UART, CAN					
Trigger Mode	Auto, Normal, and Single					
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase A→B ↑, Phase A→B↓, 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 Edges Count, Area, Cycle Area, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF					
Waveform Math	+, −, ×, ÷, FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, Digital Filter					
Waveform Storage	100 waveforms					
Communication Interface	USB host, USB device, Trig Out(Pass/Fail), LAN, and Wi-Fi (optional)					
Frequency Counter	available					
Battery	7.4V, 8000mAh, 5 hours operation					
Dimension(WxHxD)	270 x 191 x 48 (mm)					
Device Weight	Approx. 1.7kg					

Multiemeter Specifications (only apply for 2 channels model)

Display	Voltage	Current	Impedance	Diode	Auto Ranging
4 ¹/₂ digitals	mV:20.000mV-200.00mV DCV: 2.0000V – 1000.0V ACV: 2.0000V – 750.0V	ACD: 10.00A ACA: 10.00A	200.00Ω - 100.00MΩ	√	√

Specifications subject to change without prior notice.

+ Accessories   The accessories subject to final delivery.

Power Cord   Adapter   Probe   CD Rom   Quick Guide   Micro USB Cable

Probe Adjust   Stand Holder   BNC-SAM   Multimeter Lead   Current Ext Module   Bag (optional)

Model	TAO3074	TAO3104	TAO3074A	TAO3104A
Bandwidth	70MHz	100MHz	70MHz	100MHz
Sample Rate	1GS/s			
Vertical Resolution (A/D))	8 bits		8 bits/12 bits/14 bits	
Record length	40M			
Waveform Refresh Rate	45,000 wfms/s			
Horizontal Scale (s/div))	2ns/div - 1000s/div, step by 1 - 2 - 5			
Channel	4			
Display	8" color LCD, 800 x 600 pixels display, multi-touch screen			
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF			
Max Input Voltage	1MΩ ≤ 300Vrms;			
Probe Attenuation Factor	0.001X - 1000X, step by 1 - 2 - 5			
Sample Rate / Relay Time Accuracy	$\pm$10 ppm max (Ta = +25℃)			
Input Coupling	DC, AC, GND			
Vertical Sensitivity	1mV/div - 10V/div (at input)			
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I^{2}C, SPI, RS232/UART, and CAN (optional)			
Bus Decoding(optional)	I^{2}C, SPI, RS232/UART, CAN			
Trigger Mode	Auto, Normal, and Single			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase A→B ↑, Phase A→B↓, 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 Edges Count, Area, Cycle Area, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF			
Waveform Math	+, −, ×, ÷, FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, Digital Filter			
Waveform Storage	100 waveforms			
Communication Interface	USB host, USB device, Trig Out(Pass/Fail), LAN, and Wi-Fi (optional)			
Frequency Counter	available			
Battery	7.4V, 8000mAh, 5 hours operation			
Dimension(WxHxD)	270 x 191 x 48 (mm)			
Device Weight	Approx. 1.7kg			

Specifications subject to change without prior notice.

+ Accessories   The accessories subject to final delivery.

Power Cord

Adapter

Probe

CD Rom

Quick Guide

Micro USB Cable

Probe Adjust

Stand Holder

BNC-SAM

Bag (optional)

OWON

Dual Channel Handheld Oscilloscope
- HDS-N Series

+ 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

USB · WAVE RECORD · Li - ion · FFT

CE

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%, , in parallel with 20pF ± 5pF				
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	+, - , x ,÷, FFT				
Communication Interface	USB				
Battery	7.4V, 6 hours' operation				
Dimension (W x H x D)	180 ×115 ×40 (mm)				
Device Weight	Approx. 685g				

+ Multimeter Specifications

Display	Voltage	Current	Impedance	Diode	On / Off Test
$3^3/_4$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.

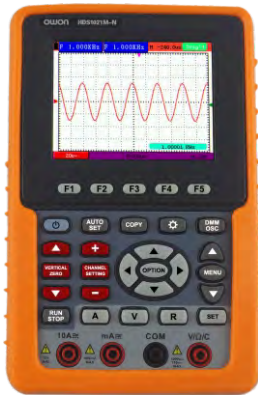| Power Cord | CD Rom | Quick Guide | USB Cable | Probe | Probe Adjust | Multimeter Lead | Adapter | 5V, 1KHz Output |

| Capacitance Ext Module | Soft Bag (optional) | Metal Case |

owon

Single Channel Handheld Oscilloscope
- HDS Series

+ 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

USB WAVE RECORD Li - ion FFT

CE

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	Approx. 645g		

+ Multimeter Specifications

Display	Voltage	Current	Impedance	Diode	On / Off Test
$3^3/_4$ 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.

Power Cord	CD Rom	Quick Guide	USB Cable	Probe	Probe Adjust	Multimeter Lead	Adapter	5V, 1KHz Output

Capacitance Ext Module   Soft Bag   Metal Case (optional)

Dual Channel Handheld Oscilloscope
- HDS200 Series

+ Oscilloscope + multimeter + waveform generator,
  multifunction in one
+ 3.5-inch high-resolution, high-contrast color LCD display,
  suitable for outdoor use
+ 18650 lithium battery power, providing up to 6 hours working time
+ USB Type-C interface, support power bank,
  support PC software connection
+ Self-calibration function
+ SCPl supported, facilitate secondary development

「Oscilloscope」 Specifications

Model	HDS242	HDS272	HDS2102	HDS2202	HDS242S	HDS272S	HDS2102S	HDS2202S
Bandwidth	40MHz	70MHz	100MHz	200MHz	40MHz	70MHz	100MHz	200MHz
Channels	2				2+1(signal generator)			
Sample Rate	250MS/s		500MS/s	1GS/s	250MS/s		500MS/s	1GS/s
Acquisition Model	Sample, Peak detect							
Record Length	8K							
Display	3.5-inch LCD							
Waveform Refresh Rate	Max 10,000 wfrms/s							
Input Coupling	DC, AC, and Ground							
Input Impedance	1 MΩ±2%, in parallel with 16pF±10pF							
Probe Attenuation Factors	1X,10X,100X,1000X,10000X							
Max. input Voltage	400V (DC+AC, PK-PK, 1MΩ input impedance) (10:1 probe attenuation)							
Bandwidth Limit (typical)	20MHz							
Horizontal Scale	5ns/div - 1000s/div, step by 1 - 2 - 5		2ns/div - 1000s/div, step by 1 - 2 - 5		5ns/div - 1000s/div, step by 1 - 2 - 5		2ns/div - 1000s/div, step by 1 - 2 - 5	
Vertical Sensitivity	10mV/div - 10V/div							
Vertical Resolution	5mV/div - 5V/div (at input)							
Trigger Type	Edge							
Trigger Modes	Auto, Normal, single							
Automatic Measurement	Frequency, Period, Amplitude, Max, Min, Mean, PK-PK							
Cursor Measurement	ΔV, ΔT, ΔT&ΔV between cursors							
Communication Interface	USB Type-C							
Dimension (W x H x D)	198 x 96 x 38 mm							
Device Weight	Approx. 0.60 kg							

「Multimeter」 Specifications

Max. Resolution	20,000 counts
Testing Mode	Voltage, Current, Resistance, Capacitance, Diode ,and Continuity test
Input Impedance	10MΩ
Max Input Voltage	AC 750V, DC 1000V
Max Input Current	DC : 10A AC : 10A
Diode	0 - 2V

「Waveform Generator」 Specifications   (Only for HDS242S, HDS272S, HDS2102S, and HDS2202S)

Frequency Output	Sine	0.1Hz - 25MHz
	Square	0.1Hz - 5MHz
	Ramp	0.1Hz - 1MHz
	Pulse	0.1Hz - 5MHz
	Arbitrary	0.1Hz - 5MHz
Sampling Rate	125MSa/s	
Channel	1-CH	
Amplitude Range	20 mVpp - 5 Vpp	
Waveform Length	8K	
Vertical Resolution	14bits	
Output Impedance	50Ω	

Specifications subject to change without prior notice.

+ **Accessories**   The accessories subject to final delivery.

Quick Guide	USB Cable	Probe	Probe Adjust	Multimeter Lead	BNC plug to alligator clips cable	Soft Bag

Differential Probe

	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	7V		
Offset	< ±5mV		
	50Ω		
	-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/300mAmainsadaptor		
Length of BNC Cable	90cm		
Length of Input Leads	60cm		
Device Weight	500g		
Dimension	186x84x38mm		165x69x26mm

Current Probe

Model	CP024						
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 6LR61 Battery		Sensitivity	1mV/10mA	1mV/0.1A		1mV/1A
Operating Temperature	0℃ to 40℃ ≤70% RH	Operating Humidity	-10℃ to 60℃ 70% RH				
Dimension (W x H x D)	180 x 68 x 32 (mm)						
Device Weight	about 250g						

High Voltage Probe

Model	OH5040	OH5018
Max.Working Voltage	DC+AC(peak)40KVCATⅡ AC(rms)： 27KVCATⅡ	DC+AC(peak)18KVCATⅡ AC(rms)： 12KVCATⅡ
Thepulse	<27KVp-p	<12KVp-p
Max.Loading Current	43µA	90µA
Bandwidth(-3dB)	50MHz	100MHz
noise	>60dBat1KHz； >50dBat1MHz	
Attenuation Ratio	1000： 1	
Accuracy	DC:≤3%;AC:≤3%(1KHz)	
Impedance	900MΩ	200MΩ
Input Capacitor	2PF	1.5PF
Cable Length	2m±0.2m	
Temperature Coefficien	≤200PPM/℃	
Operation Temp	-10～55℃	
Dimension	80(W)x80(H)x320(L)mm	
Device Weight	460g	

Model	OH5007
Max.Working Voltage	DC: 0-10KV AC(rms): 0～7KV; Vpp: 0-20KV(Pulse)
Bandwidth(-3dB)	50MHz
noise	>60dB(1KHz),>50dB(1MHz)
Attenuation Ratio	1： 1000
Accuracy	DC:±3%(DCto10KV) AC:±3%(1KHz/1KV/1KHzRMS) -3dB:0～40MHz
Impedance	100MΩ±5%
Input Capacitor	3.0PF±0.5PF
Cable Length	2m±0.2m
Temperature Coefficien	≤200PPM/℃
Operation Temp	0～+50℃
Dimension	340 x80Φ (cylindrical)
Device Weight	250g

Current Probe

Model	CP-07⁺			
Test Range	400mA - 4A		Range	DCA 400mA	DCA 4A
Resolution	0.1mA	DC Current	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℃ to 40℃ ≤70% RH	Operating Humidity	-10℃ to 60℃ 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℃- 50℃
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 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 Probe

Model	P4060	P4100	P4250
Attenuation Ratio	100X	100X	100X
Bandwidth	60MHz	100MHz	250MHz
Input R	100MΩ	100MΩ	100MΩ
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