

Multi-function test oscilloscope

- XDS3000 Series



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

14 / 12 bits

high resolution ADC

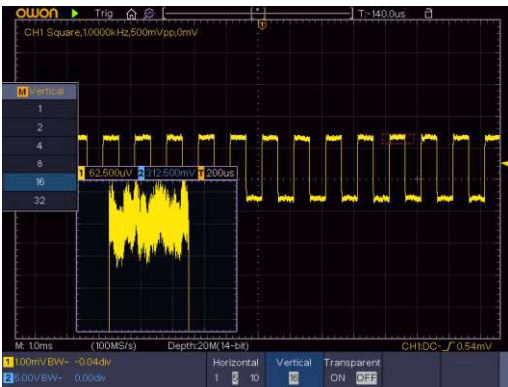
Super Performance

- + 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

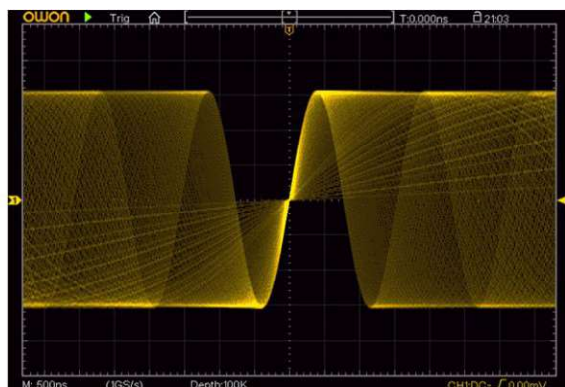
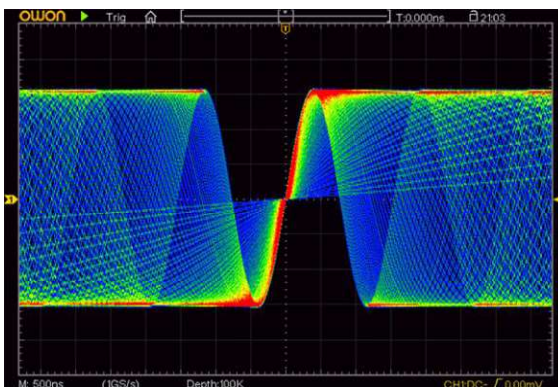
Creative New Look

- + 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

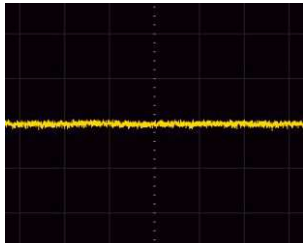
1. XDS series introduce 12 / 14 bits hardware ADC, the precision is 16/64 times against other oscilloscope on market. Equipping with OWON's original magnifier function, it can observe the signal low down to 31.25µV/div(XDS3202A, XDS3102AP).



2. multi-level grayscale, and color temperature display



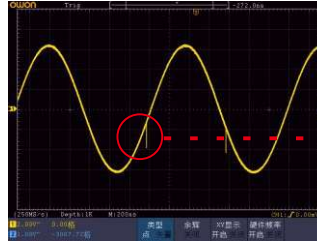
3. Xvisual platform - restore the waveform detail fully



low background noise

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, I²C, 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

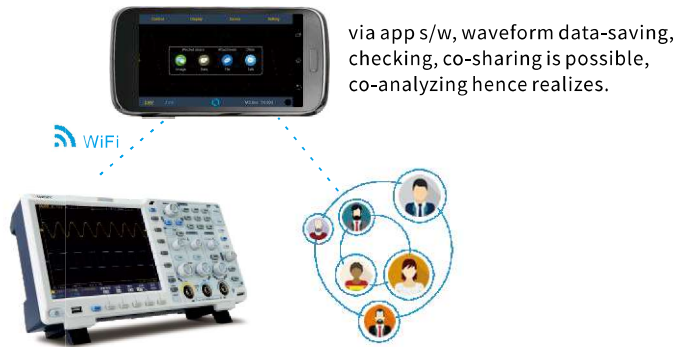
M Single
Edge
Video
Pulse
Slope
Runt
Windows
Timeout
Nth Edge

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).



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°C)							
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, Peak 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
WIFI	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°C)							
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, and RS232/UART							
Trigger Type (optional)	CAN							
Bus Decoding(optional)	I2C, SPI, RS232/UART, and CAN							
Waveform Math	+, -, ×, ÷, 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, Peak 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	3½ 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



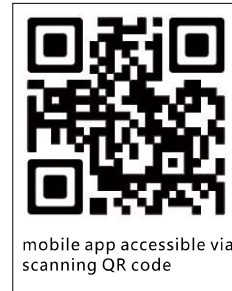
Capacitance Ext Module



Battery



Soft Bag



mobile app accessible via scanning QR code