



# XDS Series n-in-1 digital oscilloscope

*your powerful on-site measurement station)*



# 14 bits

high resolution ADC



## Super Performance

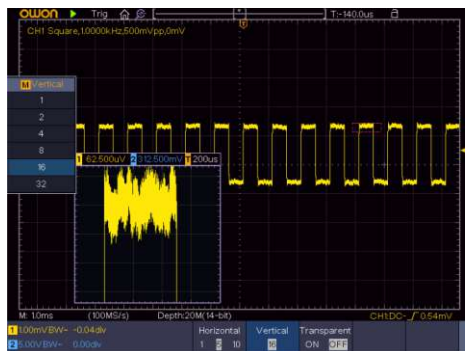
- + 8-bit, 12-bit or 14-bit high resolution ADC, restoring the waveform detail fully
- + 40M record length, and 75,000 wfms/s waveform refresh rate
- + low background noise, vertical sensitivity in 1 mV/div - 10 V/div
- + multi-trigger, and bus decoding function
- + SCPI, and LabVIEW supported

## Creative New Look

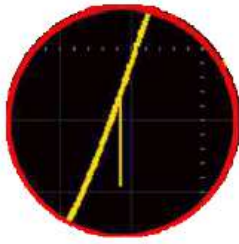
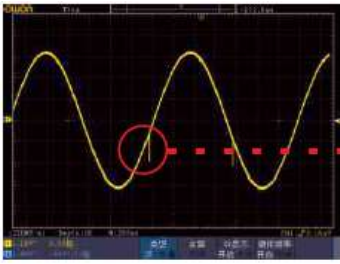
- + ultra-thin body-design, less space accommodation
- + multi-interface integration - USB host, USB device, USB port for PictBridge, LAN, AUX, and more
- + VGA port - better solution for video expansion, and teaching demonstration
- + 8 inch 800 x 600 high resolution LCD
- + optional multi-touch screen, 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 31.25 $\mu$ V/div.



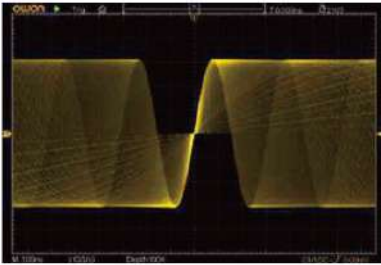
2. **Xvisual** platform - restore the waveform detail fully



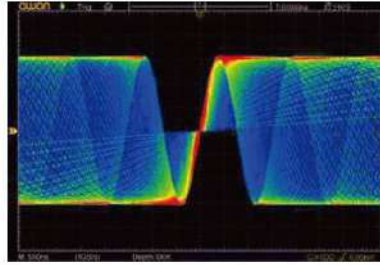
M Bus Type
RS232
I2C
SPI
CAN
UART

M TrigMode
Edge
Video
Pulse
Slope
Runt
Nth Edge
Windows
Logic

### 3. multi-level grayscale, and color temperature display



within certain unit time,  
more frequent one waveform pixel appears, more vivid it is



the frequency of waveform reflecting in color temperature value,  
larger the value is, more frequent the waveform appears

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

### 6. Its multi-point touch function improves operation efficiency considerably

### 5. serial bus coding available in I2C, SPI, RS232, and CAN

## + Performance Specifications

Model	XDS3062A	XDS3102A	XDS3202A**	XDS3102	XDS3202E	XDS3202*	XDS3302*
Bandwidth	60MHz	100MHz	200MHz	100MHz	200MHz		300MHz
Sample Rate	1GS/s (8 bits) 500MS/s (12 bits) (* 100MS/s (14 bits))			1GS/s		2GS/s	2.5GS/s
Vertical Resolution (A/D)	12 bits		14 bits	8bits			
Record length	40M						
Waveform Refresh Rate	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						
Rise Time (at input, typical)	≤5.8ns	≤3.5ns	≤1.7ns	≤3.5ns	≤1.7ns		≤1.17ns
Channel	2 + 1 (external)						
Display	8" color LCD, 800 x 600 pixels (optional 1024 x 768 pixels IPS display)						
Input Impedance	1MΩ ± 2%, in parallel with 15pF ± 5pF (*, ** 50Ω ± 2%)						
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1						
Max Input Voltage	1MΩ ≤ 300Vrms; 50Ω ≤ 5Vrms						
DC Gain Accuracy	±1.5%			±3%			
DC Accuracy	average≥16: ±(3% reading + 0.05 div) for ΔV						
Probe Attenuation Factor	0.001X - 1000X, step by 1 - 2 - 5						
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)						
Sample Rate / Relay Time Accuracy	±1ppm						
Interpolation	sin(x) / x						
Interval (ΔT) Accuracy	Single: ±(1 interval time + 1ppm x reading + 0.6ns);						

(full bandwidth)	Average > 16: $\pm(1 \text{ interval time} + 1 \text{ ppm} \times \text{reading} + 0.4 \text{ ns})$	
Input Coupling	DC, AC, and GND	
Vertical Sensitivity	1mV/div - 10V/div (at input)	
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I <sup>2</sup> C, SPI, RS232, and CAN (optional)	
Bus Decoding	I <sup>2</sup> C, SPI, RS232, and CAN (optional)	
Trigger Mode	Auto, Normal, and Single	
Vertical Range	$\pm 2\text{V}$ ( 1mv/div - 50mv/div), $\pm 20\text{V}$ ( 100mv/div - 1V/div), $\pm 200\text{V}$ (2V/div - 10V/div)	
Line / Field Frequency (video)	NTSC, PAL and SECAM standard	
Cursor Measurement	$\Delta V$ , and $\Delta T$ between cursors, $\Delta V$ and $\Delta T$ between cursors, and auto- cursors	
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	
Waveform Math	+, -, ×, ÷, FFT, FFTrms, Inta. Diff. Sart. User Defined Function, digital filter (low pass, high pass, band pass, band reject)	
Waveform Storage	100 waveforms	
Lissajou's Figure	Bandwidth	full bandwidth
	Phase Difference	$\pm 3$ degrees
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 Consumption	< 15W	
Fuse	2A, T class, 250V	
Battery (optional)	3.7V, 13200mAh	
Dimension (W x H x D)	340 x 177 x 90 mm	
Weight	2.60 kg $\pm$ 200g	

#### + Optional Module / Function

VGA	VGA+AV
TOU	Touch screen(capacitor-type)

#### + Optional Decoding Kit

RS232	RS232
SPI	SPI
I <sup>2</sup> C	I <sup>2</sup> C
CAN	CAN trigger / decoding

Specifications subject to change without prior notice.

#### + Application

electronic circuit debugging  
education and training

circuit testing

design and manufacture

automobile maintenance and testing

#### + Accessories

The accessories subject to final delivery.



Power Cord



CD Rom



Manual



USB



Probe



Probe Adjust

optional accessories:



mobile app accessible via scanning QR code



Multimeter  
Lead



Q9



Capacitance  
Ext Module



Battery



Soft Bag