

## **XDS Series**

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



# 12 or 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

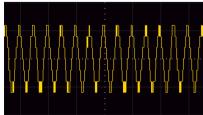
#### **Creative New Look**

- + 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-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

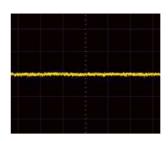
1.12-bit high vertical resolution model - XDS-A series product achieves 16 times resolution, and definition more than its general 8-bit counterpart, which makes it the better solution provider for small signal measurement, and signal detail restoration from large signal

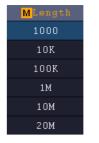


20mVpp signal measured by common 8-bit DSO, 10 times zoomed

20mVpp signal measured by 12-bit XDS series DSO, 10 times zoomed

# $2.\cancel{\text{wisual}} \text{ platform - restore the waveform detail fully}$

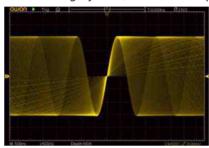




low background noise

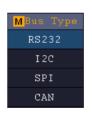
40M record length

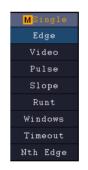
3. multi-level grayscale, and color temperature display



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

- 4. multi-trigger supported Logic, Time-out, I<sup>2</sup>C, SPI, RS232, Runt, Windows, Nth Edge, and CAN
- 5. serial bus coding available in I2C, SPI, RS232, and CAN





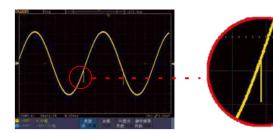
8. its built-in WiFi module facilitates mobile device connecting with XDS seris product, to get access to remote control, together with simultaneous measurement result display



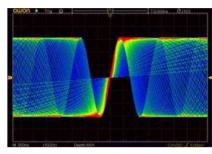




via app s/w, waveform data-saving, checking, co-sharing is possible, co-analyzing hence realizes

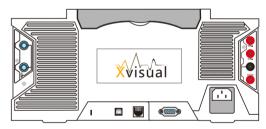


and 75,000 wfms/s refresh rate, easily capturing exceptional, and low probability events

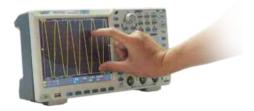


the frequency of waveform reflecting in color temperature value, larger the value is, more frequent the waveform appears

- 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



9. its multi-point touchscreen improves operation efficiency considerably



10. optional battery makes floating measurements possible, advancing the operation convenience





# **XDS Series**

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

### + Performance Specifications

_M	lodel	XDS3062A	XDS3102A	XDS3202A**	XDS3102	XDS3202*	XDS3302*	
		60MHz	100MHz	200MHz	100MHz	200MHz	300MHz	
Bandwidth Sample Rate		1GS/s(8bits) 500MS/s(12bits) (**100MS/s(14bits))		1GS/s	2GS/s	2.5GS/s		
Vertical Resolution (A/D)		12 bits 14 bits 8 bits						
Reco	rd Length	40M						
Waveform	Refresh Rate	75,000 wfms/s						
Horizonta	Horizontal Scale (s/div)		r - 1000	1ns/div - 1000 step by	2ns/div - 1000 1 - 2 - 5	1ns/div - 1000		
Rise Time (a	at input, typical)	≤5.8ns	≤3.5ns	≤1.7ns	≤3.5ns	≤1.7ns	≤1.17ns	
	nannel	2+1 (external)						
Di	isplay	8" color LCD, 800 x 600 pixels						
Input I	mpedance	1MΩ ± 2 %, in parallel with 15pF ± 5pF; (*, ***50Ω ± 2%)						
Channe	el Isolation	50Hz : 100 : 1, 10MHz : 40 : 1						
Max Inp	put Voltage	1MΩ ≤ 300Vrms; 50Ω ≤ 5Vrms						
DC Gai	n Accuracy	±1% ±3%						
DC A	Accuracy	average ≥ 16: ±(3% reading + 0.05 div) for △V						
Probe Atte	nuation Factor	0.001X - 1000X, step by 1 - 2 - 5						
LF Respo	ond (AC,-3dB)	≥5Hz (at input, AC coupling, -3dB)						
Sample Rate / Relay Time Accuracy		±1ppm						
Interpolation		sin(x)/x, x						
Interval (△T) Accuracy (fullbandwidth)		Single: ±(1 interval time + 1ppm x reading + 0.6ns); Average > 16: ±(1 interval time + 1ppm x reading + 0.4ns)						
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 (optional)		I <sup>2</sup> C, SPI, RS232, and CAN						
Trigger Mode		Auto, Normal, and Single						
Vertical Range		±2V (1mv/div - 50mv/div), ±20V (100mv/div - 1V/div), ±200V (2V/div - 10V/div)						
Line / Field Frequency (video)		NTSC, PAL and SECAM standard						
Cursor Measurement		$\triangle$ V, and $\triangle$ T between cursors, $\triangle$ V and $\triangle$ T between cursors, and auto- cursors						
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						
Wavef	orm Math	+, -, *, /, FFT						
Wavefo	rm Storage				veforms			
	Bandwidth	full bandwidth						
Lissajou's Figure	Phase Difference	±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		100 - 240 V AC, 50/60Hz, CAT II						
Power Consumption		<15W						
Fuse		2A, T class, 250V						
Battery (optional)		3.7V, 13200mAh						
Dimension (W x H x D)		3.7 v, 13200mAn 340 x 177 x 90 (mm)						
Device Weight		2.60 kg						
Device Weight		2.00 kg						

+ Multimeter (optional) Specifications

Full Scale Reading	3¾ digits (max 4000 count)	Diode	0V - 1.5V	
Input Impedance	10MΩ Continuity To		<50 (±30) beeping	
Capacitance	51.2nF - 100uF: ±(3% ± 3 digits)			
Voltage	VDC: $400$ mV, $4$ V, $400$ V: $\pm(1\pm1$ digit); max input: DC $1000$ V VAC: $4$ V, $40$ V, $400$ V: $\pm(1\pm3$ digits); frequency: $40$ Hz - $400$ Hz; max input: AC $400$ V (virtual value)			
Current	DC: $40\text{mA}$ , $400\text{mA}$ : $\pm(1.5\% \pm 1 \text{ digit})$ ; $10\text{A}$ : $\pm(3\% \pm 3 \text{ digits})$ AC: $40\text{mA}$ : $\pm(1.5\% \pm 3 \text{ digits})$ , $400\text{mA}$ : $\pm(2\% \pm 1 \text{ digit})$ , $10\text{A}$ : $\pm(3\% \pm 3 \text{ digits})$			
Impedance	$400\Omega$ : ±(1% ± 3 digits), 4KΩ - 40MΩ: ±(1% ± 1 digit)			

### + Arb Waveform Generator (optional) Specifications

. 1				
Max Frequency Output	25MHz	50MHz		
Sample Rate	125MS/s	250MS/s		
Channel	available in 1-ch, or 2-ch			
Vertical Resolution	14 bits			
Amplitude Range	10mVpp - 6Vpp			
Waveform Length	8K			
Standard Waveform	Sine, Square, Pulse, and Ramp			

### + Optional Module / Function

VGA	VGA+AV port	+ Optional Decoding Kit		
WIF	WiFi	RS232	RS232	
AWG	arb waveform generator	SPI	SPI	
DMM	digital multimeter	I2C	I <sup>2</sup> C	
TOU	touch screen (capacitor-type)	CAN	CAN 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





Manual



**USB** Cable







optional accessories:

Multimeter

Lead



CD Rom

















mobile app accessible via scanning QR code

Capacitance Soft Bag Ext Module