

XDS3000 Series 2CH Oscilloscopes Technical Specifications

Model	Vertical Resolution (A/D)	Bandwidth	Rise Time	Horizontal Scale
XDS3062A	12 bits	60 MHz	≤ 5.8 ns	2ns/div-1000s/div, step by 1 – 2 - 5
XDS3102A	12 bits	100 MHz	≤ 3.5 ns	
XDS3102	8 bits			
XDS3102AP	8 bits mode	100 MHz	≤ 3.5 ns	1ns/div-1000s/div, step by 1 – 2 - 5
	12 bits mode	25 MHz	≤ 14 ns	
	14 bits mode			
XDS3202E	8 bits	200 MHz	≤ 1.75 ns	
XDS3202A	8 bits mode	200 MHz	≤ 1.75 ns	
	12 bits mode	150 MHz	≤ 2.33 ns	
	14 bits mode	20 MHz	≤ 17.5 ns	
XDS3202	8 bits	200 MHz	≤ 1.75 ns	
XDS3302	8 bits	300 MHz	≤ 1.17 ns	

Performance Characteristics	Instruction			
Sample rate (real time)	XDS3062A XDS3102A	Dual CH	500 MS/s	
		Single CH	8 bits mode	1 GS/s
	12 bits mode		500 MS/s	
	XDS3102 XDS3202E	Dual CH	500 MS/s	
		Single CH	1 GS/s	
	XDS3102AP XDS3202A	Dual CH	8 bits mode	1 GS/s
			12 bits mode	500 MS/s
			14 bits mode	100 MS/s
		Single CH	8 bits mode	1 GS/s
	12 bits mode		500 MS/s	
	XDS3202	Dual CH	1 GS/s	
		Single CH	2 GS/s	
XDS3302	Dual CH	1.25 GS/s		
	Single CH	2.5 GS/s		
Waveform capture rate	75,000 wfms/s			
Display	8" color LCD, TFT display , 800×600 pixels			
Channel	2 + 1 (External)			
Max record length	40M			
Sampling rate / relay time accuracy	± 1 ppm (Typical, Ta = +25°C)			
Input coupling	DC, AC, Ground			
Input impedance	XDS3062A XDS3102(A) XDS3202E	1MΩ±2%, in parallel with 15pF±5pF		
	XDS3102AP XDS3202(A) XDS3302	1MΩ±2%, in parallel with 15pF±5pF; 50Ω±2%		
Max. input voltage	1MΩ: ≤300 Vrms; 50Ω: ≤5 Vrms (For certain models)			
DC gain accuracy	XDS3062A XDS3102A XDS3102AP XDS3202A	1 mV	3%	
		2 mV	2%	
		≥ 5 mV	1.5%	
	XDS3102 XDS3202E XDS3202 XDS3302	1 mV	3%	
		≥ 2 mV	2%	
Vertical sensitivity	1 mV/div - 10 V/div			
Trigger type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, RS232, CAN (optional)			

Decoding Type (optional)	RS232, I2C, SPI, CAN	
Trigger mode	Auto, Normal, Single	
Line/field frequency (Video)	Support standard NTSC, PAL and SECAM	
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 $\overline{\mu}$, Delay A→B $\overline{\sigma}$, Cycle RMS, Cursor RMS, Screen Duty, Phase, +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, VGA and AV (optional)	
Printer compatibility	PictBridge	
Mains Voltage	100V - 240 VACRMS, 50/60 Hz, CAT II	
Power Consumption	XDS3062A XDS3102(A)	< 15 W
	XDS3102AP XDS3202E XDS3202(A) XDS3302	< 24 W
Fuse	2 A, T class, 250 V	
Battery (optional)	3.7V, 13200mAh	
Touch screen (optional)	Multi-touch capacitive touch screen	

Waveform Generator (Optional)

Max frequency output	25 MHz (Sample 125 MS/s)
Channel	1-CH or 2-CH (optional) Note: Only 2-CH optional AG available for XDS3202(A), XDS3302.
Vertical resolution	14 bits
Amplitude range	2 mVpp - 6 Vpp
Waveform length	8K
Standard waveforms	Sine, Square, Ramp, and Pulse
Arbitrary waveforms	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, Noise, and others, total 46 built-in waveforms, and user-defined arbitrary waveform

Multimeter (Optional)

Full scale reading	3 $\frac{3}{4}$ digits (Max 4000 count)
Diode	0 V - 1 V
Input impedance	10 M Ω
On/off measurement	<50(\pm 30) Ω beeping
Capacitance	51.2nF - 100uF: \pm (3% \pm 3 digits)
Voltage	DCV: 400mV, 4V, 40V, 400V, 1000V: \pm (1% \pm 1digit) Max. input: DC 1000V ACV: 400mV, 4V, 40V, 400V: \pm (1% \pm 3digit) 750V: \pm (1.5% \pm 3digit) Frequency: 40Hz - 400Hz, Max. input: AC 750V (virtual value)
Current	DCA: 40mA, 400mA: \pm (1.5% \pm 1 digit) 4A, 10A: \pm (3% \pm 3digit) ACA: 40mA: \pm (1.5% \pm 3digit) 400mA: \pm (2% \pm 1digit) 4A, 10A: \pm (3% \pm 3digit)
Impedance	400 Ω : \pm (1% \pm 3digit) 4K Ω ~4M Ω : \pm (1% \pm 1digit) 40M Ω : \pm (1.5% \pm 3digit)

Mechanical Specifications

Dimension	340 mm× 177 mm×90 mm (L*H*W)
Weight	Approx. 2.6 kg (without accessories)



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