XDS3000 Series 4CH Oscilloscopes Technical Specifications

Model	Vertical Resolution (A/D)	Bandwidth	Rise Time	Horizontal Scale
XDS3064E	8 bits	60 MHz	≤ 5.8 ns	2ns/div-1000s/div, step by 1 – 2 - 5
XDS3064AE	8 bits/12 bits/14 bits			
XDS3104E	8 bits	100 MHz	≤ 3.5 ns	
XDS3104AE	8 bits/12 bits/14 bits			
XDS3104	8 bits	100 MHz	≤ 3.5 ns	1ns/div - 1000s/div, step by 1 – 2 - 5
XDS3104A	8 bits/12 bits/14 bits			
XDS3204E	8 bits	200 MHz	≤ 1.75 ns	
XDS3204AE	8 bits/12 bits/14 bits			

Performance Characteristics	Instruction			
Sample rate (real time)	XDS3064E XDS3104E	Four CH		250 MSa/s
		Dual CH*		500 MSa/s
		Single CH		1 GSa/s
	XDS3064AE XDS3104AE	8 bits mode	Four CH	250 MSa/s
			Dual CH*	500 MSa/s
			Single CH	1 GSa/s
		12 bits mode	Four CH	125 MSa/s
			Dual CH*	250 MSa/s
			Single CH	500 MSa/s
		14 bits mode	Four CH	100 MSa/s
			Dual CH	100 MSa/s
			Single CH	100 MSa/s
	XDS3104 XDS3204E	Four CH		500 MSa/s
		Dual CH*		1 GSa/s
		Single CH		1 GSa/s
	XDS3104A XDS3204AE	8 bits mode	Four CH	500 MSa/s
			Dual CH*	1 GSa/s
			Single CH	1 GSa/s
		12 bits mode	Four CH	250 MSa/s
			Dual CH*	500 MSa/s
			Single CH	500 MSa/s
		14 bits mode	Four CH	100 MSa/s
			Dual CH	100 MSa/s
			Single CH	100 MSa/s
Waveform capture rate	XDS3064E XDS3064AE XDS3104E XDS3104AE	45,000 wfms/s		
	XDS3104 XDS3104A XDS3204E XDS3204AE	70,000 wfms/s		

Display	8" color LCD, TFT display , 800×600 pixels			
Channel	4			
Max record length	When four channels are turned on, the max record length is 10M; and max 20M for two channels; max 40M for one channel.			
Sampling rate / relay time accuracy	±2.5 ppm max (Ta = +25℃)			
Input coupling	DC, AC, Ground			
Input impedance	1MΩ±2%，in parallel with 15pF±5pF			
Max input voltage	400 V (DC + AC Peak)			
DC gain accuracy	XDS3064E	1 mV		±4%
	XDS3104E	≥ 2 mV		±3%
	XDS3064AE XDS3104AE	8 bits mode	1 mV	±4%
			≥ 2 mV	±3%
		12 bits mode	1 mV	±3%
		14 bits mode	≥ 2 mV	±2%
	XDS3104 XDS3204E	1 mV		±3%
		≥ 2 mV		±2%
	XDS3104A XDS3204AE	8 bits mode	1 mV	±3%
			≥2 mV	±2%
		12 bits mode	1 mV	±3%
		14 bits mode	≥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 卐, Delay A→B 卍, Cycle RMS, Cursor RMS, Screen Duty, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF,Phase A→B 卐, Phase A→B 卍, +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	Standard	USB host, USB device, Trig Out (Pass/Fail), LAN		
	Optional	VGA		
Printer compatibility	PictBridge			
Power supply	100V - 240 VACRMS, 50/60 Hz, CAT Ⅱ			
Fuse	2 A, T class, 250 V			
Battery (optional)	3.7V, 13200mAh			
Touch screen (optional)	Multi-touch capacitive touch screen			

* For XDS3064(A)E and XDS3104(A)E, Max Sample rate (real time) for Dual CH should meet either following condition:
  - CH1&CH2 on, CH3&CH4 off;
  - CH1&CH2 off, CH3&CH4 on.

* For XDS3104(A) and XDS3204(A)E, Max Sample rate (real time) for Dual CH should meet the following condition:
CH1 and CH2 can not be turned on simultaneously, CH3 and CH4 can not be turned on simultaneously.

- CH1&CH3 on, the others off;
- CH1&CH4 on, the others off;
- CH2&CH3 on, the others off;
- CH2&CH4 on, the others off.

Waveform Generator

(Dual channels AG is optional to XDS3064E / XDS3104E;
single channel AG is optional to XDS3104(A) / XDS3204(A)E.)

Max frequency output	25 MHz
Sample rate	125 MSa/s
Channel	1 or 2
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	3¾ digits (Max 4000 count)
Diode	0 V - 1 V
Input impedance	10 MΩ
On/off measurement	<50(±30)Ω beeping
Capacitance	51.2nF - 100uF: ±(3%±3 digits)
Voltage	DCV: 400mV, 4V, 40V, 400V, 1000V: ±(1%±1digit) Max. input: DC 1000V ACV: 400mV, 4V, 40V, 400V: ±(1%±3digit) 750V: ±(1.5%±3digit) Frequency: 40Hz - 400Hz, Max. input: AC 750V (virtual value)
Current	DCA: 40mA, 400mA: ±(1.5%±1 digit) 4A, 10A: ±(3%±3digit) ACA: 40mA: ±(1.5%±3digit) 400mA: ±(2%±1digit) 4A, 10A: ±(3%±3digit)
Impedance	400Ω: ±(1%±3digit) 4KΩ~4MΩ: ±(1%±1digit) 40MΩ: ±(1.5%±3digit)

Mechanical Specifications

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

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