XDS4000 Series Oscilloscopes Technical Specifications

Model	Vertical Resolution (A/D)	Bandwidth	Rise Time	Horizontal Scale
XDS4354 XDS4352	8 bits	350 MHz	≤ 1 ns	500ps/div - 1000s/div, step by 1 – 2 - 5
XDS4504 XDS4502		500 MHz	≤ 0.7 ns	

Performance Characteristics	Instruction	
Sample rate (real time)	Four CH	1 GSa/s
	Dual CH*	2.5 GSa/s
	Single CH	5 GSa/s
Waveform capture rate	600,000 wfms/s	
Display	10.4" color LCD, TFT display , 800×600 pixels	
Channel	XDS4354 XDS4504	4
	XDS4352 XDS4502	2
Max record length	400M	
Sampling rate / relay time accuracy	±2.5 ppm max (Ta = +25℃±5℃)	
Input coupling	DC, AC, Ground	
Input impedance	1MΩ±2%，in parallel with 15pF±5pF, 50Ω±2%	
Max input voltage	1 MΩ:300Vrms ,400 V (DC + AC Peak)	
	50Ω:5Vrms	
DC gain accuracy	1 mV	±3%
	≥2 mV	±2%
Vertical sensitivity	1 MΩ：1 mV/div～10 V/div	
	50Ω：1 mV/div～1 V/div	
Trigger type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, UART/RS232, CAN (optional)	
Decoding Type (optional)	UART/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 ⅃Ϝ , Delay A→B ⅂Ⴀ , Cycle RMS, Cursor RMS, Screen Duty, FRR、FRF、FFR、FFF、LRR、LRF、LFR、LFF、 Phase A→B ⅃Ϝ , Phase A→B ⅂Ⴀ , +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 port; VGA port; EXT Trig In	
Printer compatibility	PictBridge	

Fuse	2 A, T class, 250 V
Touch screen	Multi-touch capacitive touch screen

* （**Only applicable to 4-channel models**）

Max Sample rate (real time) for Dual CH should meet either following condition:

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

Waveform Generator

Max frequency output	50 MHz
Sample rate	250 MSa/s
Channel	1
Vertical resolution	14 bits
Amplitude range	2mVpp - 5Vpp （≦50MHz） 2mVpp - 20Vpp （≦25MHz）
Waveform length	16K
Output DC and offset	Vpp≤5V/±2.5V（max）；Vpp＞5V/±10V（max）
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	4½ digits (Max 20000 − count)
Diode	0 V - 2 V
Input impedance	≥10 MΩ
On/off measurement	<50 beeping
Capacitance	2nF – 20mF: ±(4%±10 digit)

Voltage	DCV: 20mV,200mV: ±(0.5%±10digit), 2V, 20V,
	200V: ±(0.3%±5digit), 1000V: ±(0.5%±5digit)
	ACV: 200mV, 2V, 20V, 200V: ±(0.8%±10digit)
	    750V: ±(1%±10digit)
	    Frequency: 40Hz - 400Hz

Current	DCA: 20A: ±(2%±10digit) ACA: 20A: ±(2.5%±10digit)
Impedance	200Ω~2MΩ: ±(0.8%±10digit),20MΩ: ±(1%±10digit) 100MΩ: ±(5%±10digit)