



Digital Oscilloscope

DPO7000 Series

500MHz, 2GSa/s, 2Gpts Memory Depth

Digital
Oscilloscope



Product Features

- 7-in-1 instrument integration: oscilloscope, 16-channel logic analyzer, spectrum analyzer, frequency counter, DVM, arbitrary waveform generator, protocol analyzer;
- Up to 2GSa/s real-time sampling rate, 2G memory depth, hardware real-time waveform recording and playback up to 2 million frames;
- Rich serial protocol triggering and decoding;
- Up to 500,000 wfms/s waveform capture rate;
- Up to 41 waveform automated measurements;
- Multiple data gathering and analysis: search, navigate and lister, histogram, bode plotter, power analyzer, counter.

Specification

Model		DPO7504E	DPO7354E	DPO7204E	DPO7104E
Analog Channels		4			
Bandwidth		500MHz	350MHz	200MHz	100MHz
Sampling Rate		2GSa/s single channel, 2GSa/s half channels, 1GSa/s all channels			
Memory Depth		2Gpts (single channel), 1Gpts (dual channels), 500Mpts (three or four channels)			
Waveform Capture Rate		500,000 wfms/s [for 25ns, dots display, single channel, auto memory depth]			
Vertical Resolution		8 bit			
Input Sensitivity		1 M Ω : 500 μ V/div ~ 10 V/div			
		50 Ω : 500 μ V/div ~ 1 V/div			
Timebase Range		500ps/div~1 ks/div	1ns/div~1 ks/div	2ns/div~1 ks/div	5ns/div~1 ks/div
Timebase Accuracy		± 1 ppm ± 1 ppm/year aging			
Bandwidth Limit		20 MHz, 100MHz, 200MHz, 350MHz, 650MHz, 750MHz (Independent option for each channel)			
Trigger Type		Edge, Pulse, Video, Slope, Overtime, Window, Runt, Superamp, Pattern, Delay, Setup/Hold, RS232, LIN, CAN, SPI, I ² C			
Serial Bus Decode		RS232, I ² C, SPI, LIN, CAN			
Arithmetic		Add, Subtract, Multiply, Divide, FFT, A&B, A/B, A*B, IA, Intg, Diff, Sqrt, Lg, Ln, Exp, Abs, AX+B, Low Pass, High Pass, Band Pass, Band Stop			
Automatic Measurements		41 measurements, measurements update continuously with statistics			
Analyze		Counter, DVM, Power analyzer, Histogram, Search, Navigate, Bode plotter			
Recorder		≥ 2 million frames (single channel)			
Input Coupling		DC, AC or GND			
Input Impedance		1 M $\Omega \pm 1\%$, 50 $\Omega \pm 1\%$; 21 pF ± 3 pF			
Waveform Generator	Sampling Rate	200 MSa/s			
	Amplitude Resolution	12 bit			
	Max. Frequency	25 μ Hz			
	Waveform	Sine, Square, Pulse, Ramp, Noise, DC, Sinc, EXP, Rise, Fall, Lorentz, Gauss, ECG, Haver Sine, Arb.			
Digital Channels	Input Channels	16			
	Sampling Rate	1GSa/s			
Connectivity		USB host, USB device, LAN, Optional ports: HDMI, RS232			
Display		10.1 inch capacitive multi-touch, 256 intensity levels, color graded persistence			

Model

Model	Analog Channels	Bandwidth	Max. Real-time Sampling Rate	Max. Memory Depth	Max. Waveform Capture Rate	Digital Channels	Waveform Generator
DPO7102C	2	100MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7202C	2	200MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7352C	2	350MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7502C	2	500MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7104C	4	100MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7204C	4	200MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7354C	4	350MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7504C	4	500MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7102E	2	100MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7202E	2	200MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7352E	2	350MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7502E	2	500MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7104E	4	100MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7204E	4	200MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7354E	4	350MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7504E	4	500MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output