DPO3000 Digital and MSO3000 Mixed Signal Phosphor Oscilloscopes

Ideal for debugging mixed signal designs

These DPO and MSO series oscilloscopes provide all the power and performance you need for the most challenging signals. Bandwidths range from 100 to 500 MHz, with both two and four channel configurations (16 digital on MSO), with a sample rate of 2.5 GS/s. All models feature 5 M record length on all channels, letting you capture long windows of signal activity while maintaining fine timing resolution.

The MSO3000 Series offer all of the same functions of the DPO3000 series with the addition of 16-digital channels, making the MSO models ideal for debugging embedded system designs. MSO models also feature parallel bus triggering and analysis for quickly debugging parallel busses with automated trigger, decode, and search.

Wave Inspector® controls let you easily search and navigate through the 5 M of uncompromised long records as you move from point to point, allowing you to see more details much quicker. Standard integrated serial trigger, decode, and search functions including I2C, SPI, RS232/422/485/UART, CAN, LIN, and I2S/LJ/RJ/TDM bus will have you debugging signal designs faster and easier than ever before. The included NI LabVIEW SignalExpress™ Tektronix® Edition LE software provides USB plug and play applications allowing you to quickly acquire and analyze measurement signals. This software combines the optimal balance of measurement functionality with ease of use, streamlining your design and test processes.

The TekVPI probe interface enables usage with differential voltage probes, active voltage probes, and current probes directly on all oscilloscope models. The included OpenChoice® desktop software provides fast and easy transfer of settings, waveforms, measurements, and screen images over USB or LAN.

20616-04

- Continuous waveform capture rate of 50,000 wfms/s
- 5 M sample record length on every channel
- 2.5 GS/s sample rate on all channels
- Easy PC connectivity and USB mass storage capabilities
- Intuitive front-panel control for simple record length navigation
- 9-in. WVGA high resolution (800 x 480) display enables viewing of high detail waveforms
- Over 125 trigger combinations including setup/hold, serial packet, and parallel data
- Wave Inspector controls provides automated search and easy waveform navigation
- 29 automated measurements and FFT analysis

SPECIFICATIONS	
Input impedance	50 Ω, 75 Ω, 1 MΩ
Waveform capture rate	50,000 wfms/s
Record length	5 M
Connectivity	USB 2.0, Ethernet (10/100 BaseT), RS-232, LAN, GPIB*
Trigger types	Edge, sequence, logic, pulse width, runt, setup & hold, rise/fall time, video, extended video, I2C*, SPI*, CAN*, LIN*, RS-232/422/485/UART, I2S/LJ/RJ/TDM*
Waveform math	Simple waveform math, FFT, arbitrary expression math
Display	9" (229 mm) WVGA
Dimensions (W x H x D)	16½" x 8" x 5½" (419 x 203 x 140 mm)
Power	Power source voltage: 100 to 240 V ±10%; Power source frequency: 47 to 66 Hz (90 to 264 V), 360 to 440 Hz (100 to 132 V)
*Optional	

What's included: One P6139B (500 MHz, 10x) passive probe per channel, manual, OpenChoice Desktop Software, NI LabVIEW Signal Express Tektronix Edition LE software, accessory pouch, power cord, and calibration document supplied by the manufacturer. MSO models also include one P6316 16-channel logic probe and accessory kit.

Catalog No.	Model No.	Bandwith	Channels	Sample rate	Rise time	
TS-20614-25	DPO3012	100 MHz	2	2.5 GS/s	3.5 ns	
TS-20614-26	DPO3014	100 MHz	4	2.5 GS/s	3.5 ns	
TS-20614-27	DPO3032	300 MHz	2	2.5 GS/s	1.17 ns	
TS-20614-28	DPO3034	300 MHz	4	2.5 GS/s	1.17 ns	
TS-20614-30	DPO3054	500 MHz	4	2.5 GS/s	700 ps	
TS-20616-00	MSO3012	100 MHz	2 + 16 digital	2.5 GS/s	3.5 ns	
TS-20616-01	MSO3014	100 MHz	4 + 16 digital	2.5 GS/s	3.5 ns	
TS-20616-02	MSO3032	300 MHz	2 + 16 digital	2.5 GS/s	1.17 ns	
TS-20616-03	MSO3034	300 MHz	4 + 16 digital	2.5 GS/s	1.17 ns	
TS-20616-04	MSO3054	500 MHz	4 + 16 digital	2.5 GS/s	700 ps	
Accessories						
TS-17111-32	**—**	**NIST-traceable recalibration with data for models MSO/DPO3054. Available at time of purchase.**				
TS-17100-34	**—**	**NIST-traceable recalibration with data for models MSO/DPO3012, 3014, 3032, 3034. Available at time of purchase.**				