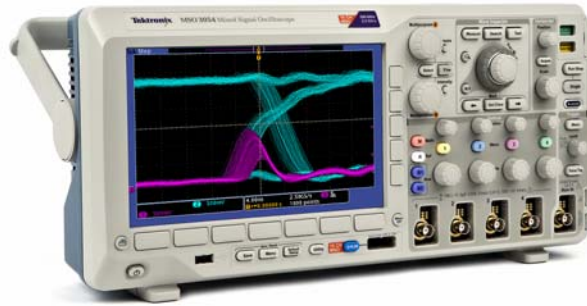


MSO/DPO3000 Series Oscilloscopes

Feature-rich tools for debugging mixed signal designs

Product Fact Sheet



Features

Benefits

Up to 4 analog and 16 digital channels	Visualize and analyze analog, digital and serial signals on a single instrument for system-level troubleshooting of complex designs.
Digital phosphor display	Quickly discover glitches and infrequent events with a greater than 50,000 wfms/s waveform capture rate and intensity-graded display.
Complete set of triggers	Rapidly capture signal anomalies with over 125 available trigger combinations, including setup/hold, serial packet content and parallel data.
Wave Inspector® controls	Easily search, mark and navigate long record lengths to find all occurrences of your event.
Automated Measurements	Simplify analysis of your device with 29 automated measurements, FFT analysis, measurement statistics, and advanced waveform math.
Parallel bus triggering and analysis (MSO Series)	Quickly debug your parallel bus with automated trigger, decode and search. Capture fast transitions with timing resolution up to 121.2 ps.
Serial triggering and analysis options	Quickly debug common serial buses with automated trigger, decode and search – I ² C, SPI, CAN, LIN, RS-232/422/485/UART and I ² S/LJ/RJ/TDM.
Power analysis option	Achieve fast, accurate results with integrated automated power measurements.

Designed to make your work easier



Wave Inspector® controls speed navigation of long waveform records

- Featuring:
- 100 MHz, 300 MHz, 500 MHz models
- 2 or 4 analog channels
- 16 digital channels (MSO Series)
- 5 Mpoint standard record length on all channels
- Up to 2.5 GS/s sample rate on all analog channels
- Up to 121.2 ps timing resolution on all digital channels with MagniVu™ high speed acquisition
- 29 automated measurements and FFT analysis
- Front panel USB host port for data storage
- Serial bus triggering and analysis options for I²C, SPI, CAN, LIN, RS-232/422/485/UART and I²S/LJ/RJ/TDM
- Parallel bus triggering and analysis, including multi-channel set-up and hold triggering (MSO Series)
- Power analysis option
- HDTV and custom video analysis option

MSO/DPO3000 Series Oscilloscopes

Key specifications and ordering information

Product Fact Sheet

Models	Analog Channels	Digital Channels	Bandwidth	Analog Sample Rate	Digital Sample Rate Main / MagniVu™	Pricing
DPO3012	2	--	100 MHz	2.5 GS/s	--	\$4,780
MSO3012	2	16	100 MHz	2.5 GS/s	500 MS/s / 8.25 GS/s	\$6,350
DPO3014	4	--	100 MHz	2.5 GS/s	--	\$5,750
MSO3014	4	16	100 MHz	2.5 GS/s	500 MS/s / 8.25 GS/s	\$7,650
DPO3032	2	--	300 MHz	2.5 GS/s	--	\$6,880
MSO3032	2	16	300 MHz	2.5 GS/s	500 MS/s / 8.25 GS/s	\$9,200
DPO3034	4	--	300 MHz	2.5 GS/s	--	\$8,280
MSO3034	4	16	300 MHz	2.5 GS/s	500 MS/s / 8.25 GS/s	\$11,100
DPO3054	4	--	500 MHz	2.5 GS/s	--	\$11,400
MSO3054	4	16	500 MHz	2.5 GS/s	500 MS/s / 8.25 GS/s	\$14,700



Standard Probes and Accessories	
• One P6139A 500 MHz, 10x Passive Probe Per Analog Channel	
• One P6316 16 Channel Logic Probe (MSO only)	
• OpenChoice® Desktop and NI LabVIEW SignalExpress™ TE (LE version) Software	
• User Manual, Front Cover and Power Cord	

Application Modules	
DPO3AUDIO - Audio Serial Triggering and Analysis (I ² S, LJ, RJ and TDM)	\$990
DPO3AUTO - Automotive Serial Triggering and Analysis (CAN, LIN)	\$990
DPO3COMP - Computer Serial Triggering and Analysis (RS-232/422/485/UART)	\$990
DPO3EMBD - Embedded Serial Triggering and Analysis (I ² C, SPI)	\$990
DPO3PWR - Power Analysis	\$1,290
DPO3VID - HDTV & Custom Video Triggering	\$625

Recommended Probes, Accessories, and Services		
TAP1500	1.5 GHz TekVPI Active Probe	\$2,050
TCP0030	120 MHz TekVPI 30A AC/DC Current Probe	\$2,960
TCP0150	20 MHz TekVPI 150A AC/DC Current Probe	\$3,450
TDP0500	500 MHz TekVPI 42V Differential Probe	\$3,000
TDP1000	1 GHz TekVPI 42V Differential Probe	\$4,180
P5205*1	100 MHz, 1.3 kV High-Voltage Differential Probe	\$1,180
ACD4000	Soft Carrying Case	\$194
Opt. R5	5 Year Repair Service Plan	Varies by Model
Opt. C3/C5	3 / 5 Year Calibration Service Plan	\$470 / \$885

Key Applications	Benefits
Design and debug of embedded systems	<ul style="list-style-type: none"> • Perform system-level troubleshooting with up to 20 channels • Easily debug parallel and serial buses: <ul style="list-style-type: none"> - Trigger on serial packet content and parallel data - Decode common serial bus standards and defined parallel buses - Automatically search through acquired data
Investigation of transient phenomena	<ul style="list-style-type: none"> • Quickly capture elusive glitches and other infrequent events with >50,000 wfms capture rate • Capture a long time window at high resolution with 5 Mpoints record length
Power supply design and analysis	<ul style="list-style-type: none"> • Quickly and accurately analyze your design with automated power measurements