# MSO/DPO2000 Series Oscilloscopes Fact Sheet

## Feature-rich tools for mixed-signal debug



#### Features Benefits

Wave Inspector® controls	Efficient analysis of waveform data with controls to easily view, search and navigate long record lengths.
Serial triggering and analysis options	Quickly debug common serial buses – I <sup>2</sup> C, SPI, CAN, LIN and RS-232/422/485/UART.
Digital phosphor display	Quickly capture and visualize glitches and infrequent events with a 5,000 wfm/s waveform capture rate and intensity-graded display.
Only 5.3 inches (134 mm) deep	Free up valuable bench-top space.
USB plug-and-play connectivity	Simply transfer, analyze and document results with NI LabVIEW SignalExpress™ TE and Tektronix OpenChoice® Desktop software.
FilterVu™ variable low-pass filter	Easily filter out unwanted noise without losing sight of important anomalies or glitches with the innovative peak detect glitch capture.
16 digital channels (MSO)	Adds basic logic analyzer functionality for mixed signal debug.
Next-generation digital waveform display (MSO)	Simple waveform visualization with color-coded ones and zeros, white edge multiple transition detection and waveform grouping.
Innovative digital probe design (MSO)	Simplifies connecting to the device-under-test with color-coding on the probe that is represented on-screen.

### Designed to make your work easier



Wave Inspector® controls speed navigation of long waveform records

#### Featuring:

- 100 MHz and 200 MHz models
- 2 or 4 analog channels; plus 16 digital channels (MSO)
- 1 M standard record length on all channels
- Up to 1 GS/s sample rate on all channels
- Large 7 inch (178 mm) wide-format TFT screen
- Front panel USB port for removable data storage
- Optional LAN, GPIB and Video Out connectivity
- Serial triggering and analysis options for I<sup>2</sup>C, SPI, CAN, LIN, RS-232/422/485/UART
- Parallel bus decoding and triggering (MSO)
- Multi-channel set-up and hold triggering (MSO)



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## Key specifications and ordering information

Models	Analog Channels	Digital Channels	Bandwidth	Sample Rate All Analog	Sample Rate Digital Pods 1 / 2	Pricing
DPO2024	4		200 MHz	1 GS/s		\$3,730
MSO2024	4	16	200 MHz	1 GS/s	1 GS/s / 500 MS/s	\$5,150
DPO2014	4		100 MHz	1 GS/s		\$3,100
MSO2014	4	16	100 MHz	1 GS/s	1 GS/s / 500 MS/s	\$4,300
DPO2012	2		100 MHz	1 GS/s		\$2,580
MSO2012	2	16	100 MHz	1 GS/s	1 GS/s / 500 MS/s	\$3,580



#### **Standard Probes and Accessories**

- One P2221 200 MHz, 1X/10X Passive Probe Per Analog Channel
- One P6316 16 Channel Logic Probe (MSO only)
- OpenChoice® Desktop and NI LabVIEW SignalExpress™ TE (LE version) Software
- Power Cord, Probe & Accessories Pouch
- Calibration Certificate, Quick Reference Manual, & Documentation on CD

Application Modules	
<b>DPO2EMBD -</b> Embedded Serial Triggering and Analysis (I <sup>2</sup> C, SPI).	\$695
DPO2COMP - Computer Serial Triggering and Analysis (RS-232/422/485/UART).	\$695
DPO2AUTO - Automotive Serial Triggering and Analysis (CAN, LIN).	\$695
DPO2CONN - Ethernet and Video Out Connectivity Module.	\$395

Recommended Probes, Accessories, and Services			
TAP1500	1.5 GHz TekVPI Active Probe.	\$1,910	
TCP0030	120 MHz TekVPI 30A AC/DC Current Probe.	\$2,870	
TDP1500	1.5 GHz TekVPI 8V Differential Probe.	\$4,560	
TDP0500	500 MHz TekVPI 42V Differential Probe.	\$2,910	
ACD2000	Soft Transit Case.	\$ 190	
SIGEXPTE	NI LabVIEW SignalExpress™ Tektronix Edition Software.	\$699	
Opt. R5	5 Year Repair Service Plan.	Varies	
Opt. C3/C5	3, 5 Year Calibration Service Plan.	Varies	

Key Applications	Benefits	
<ul> <li>Design and debug of embedded systems</li> </ul>	<ul> <li>Perform rapid serial bus debug:</li> <li>Decode common serial bus standards</li> <li>Trigger on serial packet content</li> <li>Search through acquired data</li> </ul>	
Mixed signal design and debug (MSO2000)	<ul> <li>Visualize and correlate analog and digital signals on a single instrument with 16 integrated digital channels</li> </ul>	
<ul> <li>Investigation of transient phenomena</li> </ul>	<ul> <li>Quickly capture elusive glitches and other infrequent events with 5,000 wfm/s waveform capture rate</li> <li>Capture a long time window at high resolution with the deep record length</li> </ul>	
<ul> <li>Visualization of signals masked by noise</li> </ul>	■Reveal characteristics of your signal overshadowed by noise with FilterVu <sup>™</sup> variable low-pass filter	

www.tektronix.com/mso2000 www.tektronix.com/dpo2000



