

# OSCILLOSCOPE SELECTION GUIDE

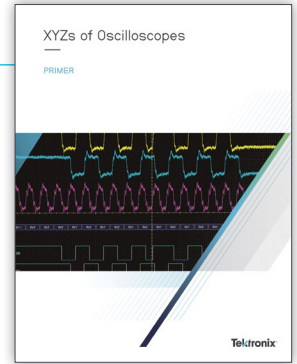
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# OSCILLOSCOPES

Tektronix offers oscilloscopes for many different applications and uses. To help you choose the right scope for your needs, the most common criteria for selecting a scope are listed below, along with helpful tips for determining your requirements.

For more information about oscilloscope specifications, download the XYZs of Oscilloscopes Primer.



## Choosing Your Oscilloscope

### 1 Bandwidth

All oscilloscopes have a low-pass frequency response that rolls off at higher frequencies. Oscilloscope bandwidth is specified as the frequency at which a sinusoidal input signal is attenuated to 70.7% of the signal's true amplitude – the -3 dB point. Choose an oscilloscope with sufficient bandwidth to capture all relevant frequency components of your signal. For signals with well-defined edges it can take 5 to 7 times the frequency of the fundamental frequency to accurately represent the signal. If you work with digital signals, it may be easier to compare your signal rise times to oscilloscope rise time specifications.

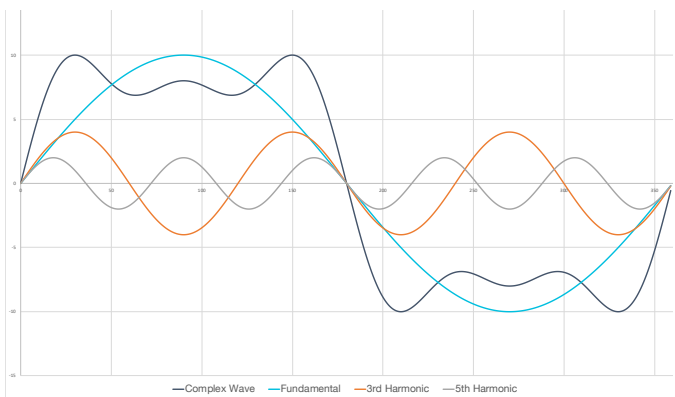


FIG 01. Square waves and pulses include higher frequencies than the fundamental frequency.

### 2 Input Channels

Having more input channels lets you see more of what's going on in your design. Today's oscilloscopes offer more than just 2 or 4 analog input channels.

- Newer scopes are available with up to 6 or 8 input channels
- Mixed signal oscilloscopes offer digital channels to expand visibility beyond the analog channels available on the instrument
- If you are working with RF signals, the Tektronix MDO Series of mixed domain oscilloscopes offers a built-in spectrum analyzer.

### 3 Sample Rate

The faster an oscilloscope samples, the greater the resolution and detail of the displayed waveform, and the less likely that critical information or events will be lost. Your oscilloscope must sample at least twice as fast as the highest frequencies in your signals. Remember that digital signals with fast edges include harmonic frequencies that can be several times higher than the fundamental.

### 4 Record Length

Record length is the number of samples the oscilloscope can digitize and store in a single acquisition. Since an oscilloscope can store only a limited number of samples, the waveform duration – or length of “time” captured – will be inversely proportional to the oscilloscope's sample rate. A longer record length enables a longer time window to be captured with high resolution.

$$\text{Captured Time} = (\text{Record Length}) / (\text{Sample Rate})$$

### 5 Vertical Resolution

The resolution of an oscilloscope's analog-to-digital converters determines its ability to capture and measure signal detail. 12-bit converters measure 4096 levels while 8-bit converters measure 256 levels.

### 6 Features and Analysis Capability

Tektronix oscilloscopes offer a range of features and analysis capabilities. When choosing your scope, you should review available triggers, waveform search tools, automated measurements, and analysis packages such as serial bus analysis, jitter and power analysis to ensure they meet your needs.



## Introducing the 3 Series MDO and 4 Series MSO

These new oscilloscopes feature big, crisp 1920 x 1080 displays and the same built-for-touch user interface as the award-winning 5 Series MSO. The 4 Series offers up to 6 FlexChannel® inputs, while the 3 Series offers a choice of a 1 GHz or 3 GHz built-in spectrum analyzer. Now there's a next-generation scope for every engineer.

[LEARN MORE](#)

## TYPES OF OSCILLOSCOPES

### Mixed Signal Oscilloscopes – 70 MHz to 33 GHz

The engineer's choice for design and debug. They combine traditional oscilloscope input channels with digital input channels, long record length with powerful search features, and protocol support for serial buses.

### Mixed Domain Oscilloscopes – 100 MHz to 1 GHz

For design and debug work, they offer the same capabilities as mixed signal oscilloscopes, but also offer a built-in spectrum analyzer, adding RF debugging to the analog/digital capabilities.

### Advanced Signal Analysis Oscilloscopes – 350 MHz to 70 GHz

The emphasis is on analysis. They provide high acquisition performance and run Windows, thus supporting a wide range of analysis software. MSO versions include digital channels. They can be equipped for serial data analysis, jitter analysis, standards testing, and serial decoding capability.

### High-Speed Digitizers DC to 8 GHz

When performance, channel density and cost-per-channel are critical, these low-profile instruments are a great fit. They offer the same performance as bench instruments in a rack-friendly form factor.

### Sampling Oscilloscopes – DC to 80 GHz

For very high speed signal analysis, both electrical and optical, our sampling oscilloscopes support jitter and noise analysis with ultra-low jitter acquisitions. They also perform TDR and S-parameter measurements.

### Basic Oscilloscopes – 30 MHz to 200 MHz

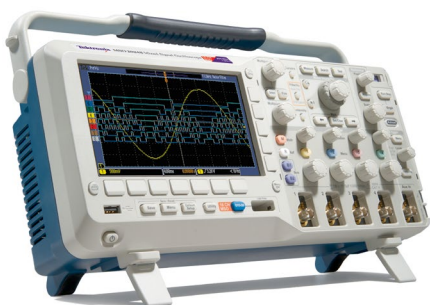
For basic signal visualization and more, these instruments are solid performers with ample supporting materials, and generous warranties. Special features for education.

### Battery Powered Oscilloscopes with Isolated Channels – 100 MHz to 200 MHz

Safely and easily make 4-channel floating measurements, including 3-phase power measurements.

### TDS Series Oscilloscopes – 50 MHz to 500 MHz

These capable industry-favorites have a large installed base, and thousands of companies rely on them as part of their test and measurement fleets. They continue to be fully supported.



## MSO/DPO2000B Series

Test more, spend less with an oscilloscope that's packed with features and is also light on price. Measure as many as 20 channels of analog and digital signals. Speed debug with automated serial and parallel bus analysis. Search your entire record instantly with Wave Inspector®. Entry level has never been so powerful.

MODEL	DPO2002B	MSO2002B	DPO2004B	MSO2004B	DPO2012B	MSO2012B
Analog Channels	2	2	4	4	2	2
Digital Channels	—	16	—	16	—	16
Analog Bandwidth	70 MHz	70 MHz	70 MHz	70 MHz	100 MHz	100 MHz
Analog Sample Rate	1 GS/s	1 GS/s	1 GS/s	1 GS/s	1 GS/s	1 GS/s

MODEL	DPO2014B	MSO2014B	DPO2022B	MSO2022B	DPO2024B	MSO2024B
Analog Channels	4	4	2	2	4	4
Digital Channels	—	16	—	16	—	16
Analog Bandwidth	100 MHz	100 MHz	200 MHz	200 MHz	200 MHz	200 MHz
Analog Sample Rate	1 GS/s	1 GS/s	1 GS/s	1 GS/s	1 GS/s	1 GS/s

- 1 Mpoint record length on all channels
- Over 125 available trigger combinations, including setup/hold, serial packet and parallel data
- Automated search and easy waveform navigation with Wave Inspector®
- 29 automated measurements and FFT analysis
- 5-year warranty
- Quickly pan/zoom and automatically search your waveforms with Wave Inspector®.
- Automatically trigger, decode and search your serial buses with optional analysis modules.

### SHIPS WITH PRODUCT

One TPP0100 100MHz, 10X Passive Probe Per Analog Channel (70 MHz model)  
 One TPP0200 200 MHz, 10X Passive Probe Per Analog Channel  
 (100 MHz & 200 MHz models)  
 One P6316 16 Channel Logic Probe (MSO only)  
 OpenChoice® Desktop Software  
 Calibration Certificate, Quick Reference Manual & Documentation on CD, Power Cord  
 5-year Warranty

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories



### 3 Series MDO

Introducing the new intuitive 3 Series mixed domain scope with our award-winning user interface, the largest HD display in its class and more capabilities, including RF measurements with unique built-in hardware spectrum analyzer for EMI and IoT tests. All without using more bench space.

MODEL	MD032	MD034
Analog Channels	2	4
Digital Channels	16 (optional)	16 (optional)
Bandwidth	100 MHz to 1 GHz	100 MHz to 1 GHz
Sample Rate	Up to 5 GS/s	Up to 5 GS/s
Spectrum Analyzer	Up to 3 GHz (optional)	Up to 3 GHz (optional)
Arbitrary Waveform Generator	50 MHz (optional)	50 MHz (optional)

- The largest 11.6-inch HD (1920x1080) capacitive touch display in its class
- Award-winning user interface
- Optional 16 digital channels for mixed signal analysis
- Built-in spectrum analyzer available in 1 GHz or 3 GHz versions
- Optional built-in function generator
- 10 Mpoint record length on all channels
- Wide range of serial bus decoding and triggering options
- Less than 6-inches deep on the bench
- Fully upgradeable for future test needs

#### SHIPS WITH PRODUCT

One passive probe per analog input, TPP0250 (for models with 100 MHz or 200 MHz bandwidth), TPP0500B (for models with 350 MHz, 500 MHz or 1 GHz bandwidth)  
 Calibration certificate, installation and safety manual  
 Accessory case with power cord  
 3-year warranty

#### INSTRUMENT OPTIONS

- Bandwidth 100 MHz, 200 MHz, 350MHz, 500 MHz, 1 GHz
- MSO (16 digital channels)
- Arbitrary/Function Generator
- 1 GHz or 3 GHz spectrum analyzer

#### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Power analysis
- See datasheet for a complete list

#### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

### 4 Series MSO

With the largest display and highest available channel count in its class, the 4 Series offers unprecedented insight in a bench-friendly package. And its made-for-touch user interface works exactly as you'd expect.

MODEL	MS044	MS046
Input Channels	4 FlexChannel® inputs	6 FlexChannel® inputs
Digital Channels	8 to 32; increments of 8 (optional)	8 to 48; increments of 8 (optional)
Bandwidth	200 MHz to 1.5 GHz (optional)	200 MHz to 1.5 GHz (optional)
Sample Rate	6.25 GS/s (analog); 6.25 GS/s (digital)	6.25 GS/s (analog); 6.25 GS/s (digital)

- 13.3 inch, HD capacitive touch display
- 4 or 6 FlexChannel® inputs can each handle 1 analog or 8 digital signals
- 12-bit Analog-to-digital converters with enhanced resolution up to 16-bits
- Optional Arbitrary/Function generator
- Optional Power, Serial Bus, and Spectrum View analysis packages
- Analyze multiple signals with ease using the gesture control (pinch-zoom-swipe) touchscreen, front panel controls, or a mouse

#### SHIPS WITH PRODUCT

Four passive probes; TPP0250 (for 200 MHz bandwidth), TPP0500B (for all other bandwidths)  
 Calibration certificate, installation and safety manual  
 Accessory case with power cord  
 3-year warranty

#### INSTRUMENT OPTIONS

- Bandwidth: 200 MHz, 350 MHz, 500 MHz, 1 GHz, 1.5 GHz
- 62.5 M/ch extended record length
- Arbitrary/Function generator

#### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial bus standards
- Power analysis
- Spectrum View analysis

#### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- TLP058 general purpose logic probe supports 8 digital channels
- Available soft case, hard case, and rackmount kit
- See datasheet for a complete list of options, and compatible probes and accessories



## MDO3000 Series

This scope features six integrated instruments to capture analog, digital and RF signals with one scope. And add instruments, analysis functions and bandwidth as your needs change.

MODEL	MD03012	MD03014	MD03022	MD03024	MD03032
Analog Channels	2	4	2	4	2
Digital Channels (Optional)	16	16	16	16	16
Analog Bandwidth	100 MHz	100 MHz	200 MHz	200 MHz	350 MHz
Analog Sample Rate	2.5 GS/s	2.5 GS/s	2.5 GS/s	2.5 GS/s	2.5 GS/s
Digital Sample Rate Main/MagniVu™	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s
Spectrum Analyzer Input	1	1	1	1	1
Spectrum Analyzer Frequency Range Standard/Optional	9 kHz - 100 MHz / 9 kHz - 3 GHz	9 kHz - 100 MHz / 9 kHz - 3 GHz	9 kHz - 200 MHz / 9 kHz - 3 GHz	9 kHz - 200 MHz / 9 kHz - 3 GHz	9 kHz - 350 MHz / 9 kHz - 3 GHz

MODEL	MD03034	MD03052	MD03054	MD03102	MD03104
Analog Channels	4	2	4	2	4
Digital Channels (Optional)	16	16	16	16	16
Analog Bandwidth	350 MHz	500 MHz	500 MHz	1 GHz	1 GHz
Analog Sample Rate	2.5 GS/s	2.5 GS/s	2.5 GS/s	5 GS/s	5 GS/s
Digital Sample Rate Main/MagniVu™	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s	500 MS/s / 8.25 GS/s
Spectrum Analyzer Input	1	1	1	1	1
Spectrum Analyzer Frequency Range Standard/Optional	9 kHz - 350 MHz / 9 kHz - 3 GHz	9 kHz - 500 MHz / 9 kHz - 3 GHz	9 kHz - 500 MHz / 9 kHz - 3 GHz	9 kHz - 1 GHz / 9 kHz - 3 GHz	9 kHz - 1 GHz / 9 kHz - 3 GHz

- Integrated 6-in-1 oscilloscope that offers a spectrum analyzer, arbitrary function generator, logic analyzer, protocol analyzer and digital voltmeter
- Spectrum Analyzer standard on all models
- 10 Mpoint record length on all channels
- >280,000 wfms max. waveform capture rate with FastAcq
- Automated search and waveform navigation with Wave Inspector®
- Monitor slowly changing RF events at a glance with spectrogram display.

### SHIPS WITH PRODUCT

One Low C Passive Probe Per Channel, TPP1000 on 1 GHz Models, TPP0500B on 350 and 500 MHz Models, TPP0250 on all 100 and 200 MHz Models; One P6316 16 Channel Logic Probe (with option MDO3MSO only); N-to-BNC Adapter; OpenChoice® Desktop; Calibration Certificate, Installation and Safety Manual, & Documentation on CD; Accessory Bag; Front Panel Language Overlay (if other than English); Power Cord; 3-year Warranty

### INSTRUMENT OPTIONS

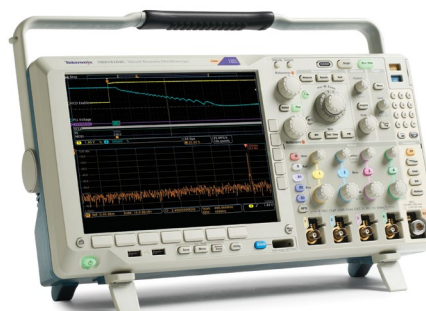
- Arbitrary/Function Generator
- MSO (16 digital channels)
- 3 GHz spectrum analyzer

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Power analysis
- Limit and mask tests
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories



## MDO4000C Series

The MDO4000C offers up to six built-in instruments, each with exceptional performance to address tough challenges. It's completely customizable and fully upgradeable. Every MDO4000C features powerful triggering, search and analysis, and these are the only scopes to offer synchronized analog, digital and RF signal analysis at the same time – perfect for troubleshooting problems with EMI or wireless communications.

MODEL	MD04024C	MD04034C	MD04054C	MD04104C
Analog Channels	4	4	4	4
Digital Channels*	16	16	16	16
Analog Bandwidth	200 MHz	350 MHz	500 MHz	1 GHz
Analog Sample Rate	2.5 GS/s	2.5 GS/s	2.5 GS/s	5 GS/s
Digital Sample Rate Main/MagniVu™	500 MS/s / 16.5 GS/s	500 MS/s / 16.5 GS/s	500 MS/s / 16.5 GS/s	500 MS/s / 16.5 GS/s
Spectrum Analyzer Input*	1	1	1	1
Spectrum Analyzer Frequency Range*	9 kHz – 3 GHz or 6 GHz	9 kHz – 3 GHz or 6 GHz	9 kHz – 3 GHz or 6 GHz	9 kHz – 3 GHz or 6 GHz

\*Optional

- 6-in-1 oscilloscope offers a spectrum analyzer, arbitrary/function generator, logic analyzer, protocol analyzer and digital voltmeter
- Spectrum analyzer available in 3 GHz or 6 GHz frequency ranges with up to 3.75 GHz capture bandwidth
- 20 Mpoint record length on all channels
- >340,000 wfms max. waveform capture rate with FastAcq
- Use it as an oscilloscope OR a spectrum analyzer OR combined to capture synchronized analog, digital and RF signals.

### SHIPS WITH PRODUCT

Four TPP0500B (≤500 MHz models) or TPP1000 (1 GHz models) Passive Voltage Probes  
OpenChoice® Desktop Software, SignalVu-PC Software  
Calibration Certificate, Quick Reference Manual & Documentation on CD  
Front Panel Cover, Accessory Bag, Power Cord  
3-year Warranty

### INSTRUMENT OPTIONS

- Arbitrary/Function Generator
- MSO (16 digital channels)
- 3 or 6 GHz spectrum analyzer

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Power analysis
- Limit and mask tests
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories



## 5 Series MSO

With a remarkably innovative pinch-swipe-zoom touchscreen user interface, the industry's largest high-definition display, and 4, 6, or 8 FlexChannel® inputs that let you measure one analog or eight digital signals, the 5 Series MSO is ready for today's toughest challenges, and tomorrow's too. It sets a new standard for performance, analysis, and overall user experience.

MODEL	MS054	MS056	MS058
Input Channels	4 FlexChannel inputs	6 FlexChannel inputs	8 FlexChannel inputs
Digital Channels	8 to 32, in increments of 8 (optional)	8 to 48, in increments of 8 (optional)	8 to 64, in increments of 8 (optional)
Bandwidth	350 MHz to 2 GHz (optional)	350 MHz to 2 GHz (optional)	350 MHz to 2 GHz (optional)
Sample Rate	6.25 GS/s (analog); 6.25 GS/s (digital)	6.25 GS/s (analog); 6.25 GS/s (digital)	6.25 GS/s (analog); 6.25 GS/s (digital)

- 15.6 inch, HD capacitive touch display delivers unmatched signal visibility
- 4, 6 or 8 FlexChannel® inputs can each handle 1 analog or 8 digital signals
- 12-bit Analog-to-digital converters with enhanced resolution up to 16 bits
- Standard 62.5 M/ch record length
- Spectrum View spectrum analysis
- Optional Arbitrary/Function Generator
- Get the big picture with a 15.6 HD display. Use the capacitive pinch-zoom-swipe touchscreen, front panel controls, or mouse to analyze multiple signals with ease.

### SHIPS WITH PRODUCT

One passive probe per FlexChannel input, TPP0500B (for models with 350 MHz or 500 MHz bandwidth) or TPP1000 (for models with 1 GHz or 2 GHz bandwidth)  
 Calibration certificate, Installation and safety manual  
 Accessory pouch with integrated front cover, Mouse, Power cord  
 3-year warranty

### INSTRUMENT OPTIONS

- Bandwidth 350 MHz, 500 MHz, 1 GHz, 2 GHz
- 125 M/ch, 250 M/ch or 500 M/ch Extended Record Length
- Arbitrary/Function Generator
- SSD with Windows OS

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Compliance testing for key serial standards
- Power analysis
- Jitter analysis
- RF vs time analysis and trigger
- Power rail analysis
- Inverter motor and drive analysis
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- TLP058 general purpose logic probe supports 8 digital channels
- Available hard case and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

## 6 Series MSO

With the lowest input noise and up to 8 GHz analog bandwidth, the 6 Series MSO provides the best signal fidelity for analyzing and debugging systems with GHz clock and bus speeds. An intuitive pinch-swipe-zoom touchscreen user interface, coupled with a 15.6-inch high definition display, and FlexChannel® inputs make the 6 Series MSO ready for today's toughest challenges and tomorrow's too.

MODEL	MS064
Input Channels	4 FlexChannel inputs
Digital Channels	8 to 32, in increments of 8 (optional)
Bandwidth	1 GHz to 8 GHz (optional)
Sample Rate	25 GS/s (analog); 25 GS/s (digital)

- 15.6 inch, HD capacitive touch display delivers unmatched signal visibility
- 4 FlexChannel® inputs can each handle 1 analog or 8 digital signals
- Lowest noise at high sensitivity
- >70% noise reduction from previous generation oscilloscopes
- 12-bit Analog-to-digital converters with enhanced resolution up to 16 bits
- Standard 62.5 M/ch record length
- Spectrum View spectrum analysis
- Optional Arbitrary/Function Generator
- Get the big picture with a 15.6" HD display. Use the capacitive pinch-zoom-swipe touchscreen, front panel controls, or mouse to analyze multiple signals with ease.

### SHIPS WITH PRODUCT

One 1 GHz TPP1000 passive probe per FlexChannel input  
 Calibration certificate, Installation and safety manual  
 Accessory pouch with integrated front cover, Mouse, Power cord  
 3-year warranty

### INSTRUMENT OPTIONS

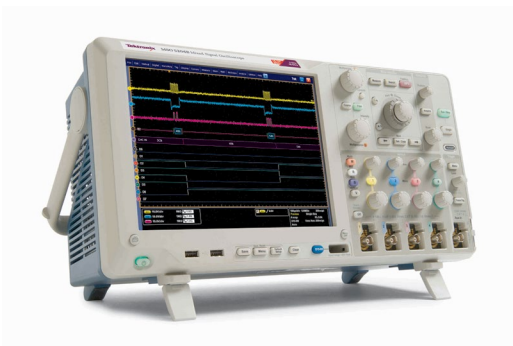
- Bandwidth 1 GHz, 2.5 GHz, 4 GHz, 6 GHz, 8 GHz
- 125 M/ch, 250 M/ch, 500 M/ch or 1 G/ch Maximum Extended Record Length
- Arbitrary/Function Generator
- SSD with Windows OS

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Compliance testing for key serial standards
- Power analysis
- Jitter analysis
- Power rail analysis
- Memory bus analysis
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, TriMode, high voltage, isolated, and current probes
- TLP058 general purpose logic probe supports 8 digital channels
- Available hard case and rackmount kit
- See datasheet for a complete list of compatible probes and accessories



## MSO/DPO5000B Series

Today's faster data rates and tighter timing margins require an oscilloscope with outstanding signal acquisition performance and analysis capabilities. Tektronix MSO/DPO5000B Series oscilloscopes provide exceptional signal fidelity, with 2 GHz and 10 GS/s sample rate, along with advanced analysis and math capabilities. MSO models include 16 digital timing channels, and all models can be equipped to decode common serial protocols, to provide a comprehensive view of your systems.

MODEL	DP05034B	MS05034B	DP05054B	MS05054B
Analog Channels	4	4	4	4
Digital Channels	—	16	—	16
Analog Bandwidth	350 MHz	350 MHz	500 MHz	500 MHz
Analog Sample Rate (4 Channels/ 2 Channels)	5 GS/s	5 GS/s	5 GS/s	5 GS/s
Digital Sample Rate Main/MagniVu™	—	500 MS/s / 16.5 GS/s	—	500 MS/s / 16.5 GS/s

MODEL	DP05104B	MS05104B	DP05204B	MS05204B
Analog Channels	4	4	4	4
Digital Channels	—	16	—	16
Analog Bandwidth	1 GHz	1 GHz	2 GHz	2 GHz
Analog Sample Rate (4 Channels/ 2 Channels)	5 GS/s /10 GS/s	5 GS/s /10 GS/s	5 GS/s /10 GS/s	5 GS/s /10 GS/s
Digital Sample Rate Main/MagniVu™	—	500 MS/s / 16.5 GS/s	—	500 MS/s / 16.5 GS/s

- 350 MHz, 500 MHz, 1 GHz, and 2 GHz models
- >250,000 wfms max. waveform capture rate with FastAcq™ technology
- 10 GS/s max sampling and 250 Mpoints memory (optional)
- Windows 10 Enterprise 64-bit operating system with touch-screen display
- Extensive analysis including jitter/timing and user defined math (i.e., MATLAB)
- Visual triggering standard with search and mark
- Achieve greater than 11 bits vertical resolution with HiRes sampling and reduce unwanted noise while capturing signal details.
- Perform advanced protocol triggering and decode on mid-speed and low-speed serial and buses (optional).

### SHIPS WITH PRODUCT

Four TPP0500B (350 MHz and 500 MHz models) or TPP1000 (1 GHz and 2 GHz models) Passive Voltage Probes; One P6616 16 Channel Logic Probe (MSO only); Calibration Certificate, Mouse, Stylus; Front Panel Cover, Accessory Bag, Power Cord; 1-year Warranty

### INSTRUMENT OPTIONS

- 50M/ch or 125M/ch extended record length

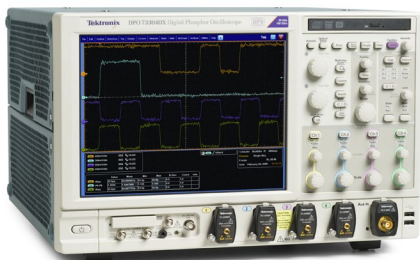
### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Compliance testing for key serial standards
- Memory bus analysis
- Vector signal analysis
- Power analysis
- Jitter analysis
- Limit and mask testing
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories





### MSO/DP070000C/DX Series

Whether you're at first power-up on your latest design, verifying compliance to the fastest standards, or researching fundamentals of the universe, you have the performance, precision, and tools to get your job done faster.

MODEL	MSO/DP070404C	MSO/DP070604C	MSO/DP070804C	MSO/DP071254C	MSO/DP071604C
Analog + Digital Channels	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)
Analog Bandwidth	4 GHz	6 GHz	8 GHz	12.5 GHz	16 GHz
Sample Rate (2/4 Channels)	25 GS/s	25 GS/s	25 GS/s	100/50 GS/s	100/50 GS/s
Record Length (Std/Opt)	31 Mpoints/125 Mpoints	31 Mpoints/125 Mpoints	31 Mpoints/125 Mpoints	31 Mpoints/250 Mpoints	31 Mpoints/250 Mpoints

MODEL	MSO/DP072004C	MSO/DP072304DX	MSO/DP072504DX	MSO/DP073304DX
Analog + Digital Channels	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)	4 (DPO), 4 + 16 (MSO)
Analog Bandwidth	20 GHz	23 GHz	25 GHz	33 GHz
Sample Rate (2/4 Channels)	100/50 GS/s	100/50 GS/s	100/50 GS/s	100/50 GS/s
Record Length (Std/Opt)	31 Mpoints/250 Mpoints	31 Mpoints/1 Gpoints	31 Mpoints/1 Gpoints	31 Mpoints/1 Gpoints

- 4 to 33 GHz true analog bandwidth for measurements on the latest high-speed serial standards
- 100 GS/s Sample Rate on 2 Channels
- 16 Logic Channels with 80 ps Timing Resolution for Debug of Digital and Analog Signals (MSO70000 models)
- iCapture – One Connection for Analog and Digital Signals (MSO70000 models)
- Fastest Waveform Capture Rate with >300,000 wfms/s Maximum
- Up to 1 Gpoints Record Length with MultiView Zoom™ for Quick Navigation and Advanced Search
- Visual Trigger to Precisely Qualify Triggers and Find Unique Events in Complex Waveforms
- Nearly 50 Application-specific Solutions Enable Standard-specific Certification, Measurement Automation, and Extended Signal Analysis.

#### SHIPS WITH PRODUCT

Accessory pouch, front cover, mouse, keyboard, user manual, (4) TekConnect® to 2.92 mm adapters and (1) TekConnect-to-BNC adapter, static protection wrist strap, MSO/DP070000 software/GPIB reference on instrument HDD, performance verification procedure PDF file, calibration certificate documenting NIST traceability, Z 540-1 compliance and ISO9001, power cord, one-year warranty, MSO Models Include: P6717A Logic Probe, Logic Probe Deskew Fixture

#### INSTRUMENT OPTIONS

- Frame and bit error rate detector
- Triggering and decoding for 8b/10b
- Extended record length to 62.5, 125, 250, or 500 Mpoints/ch

#### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Compliance testing for key serial standards
- Memory bus analysis
- Vector signal analysis
- Cable, channel, and probe compensation
- Serial data link analysis
- Power analysis
- Jitter analysis
- Limit and mask testing
- See datasheet for a complete list

#### RECOMMENDED PROBES AND ACCESSORIES

- TekConnect® probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, optical, and current probes
- Available hard case and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

### DP070000SX Series

DP070000SX 70 GHz Oscilloscope provides low-noise, real-time acquisition using Tektronix' patented Asynchronous Time Interleaving technology. Its compact, scalable package allows flexible system configurations. Get the most accurate real-time performance for ultra-bandwidth measurement applications like coherent optical modulation, 100G/400G Datacom, wideband RF, and leading-edge research.

MODEL	DP071304SX	DP071604SX	DP072304SX	DP073304SX	DPS73308SX (2-UNIT SYSTEM)
Analog Channels	2, 4	2, 4	2, 4	2, 4	4, 4
Analog Bandwidth	13 GHz, 13 GHz	16 GHz, 16 GHz	23 GHz, 23 GHz	33 GHz, 23 GHz	33 GHz, 23 GHz
Sample Rate	100GS/s, 50GS/s	100GS/s, 50GS/s	100GS/s, 50GS/s	100GS/s, 50GS/s	100GS/s, 50GS/s
Record Length (Std/Opt)	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints

MODEL	DP075002SX	DPS75004SX (2-UNIT SYSTEM)	DP075902SX	DPS75904SX (2-UNIT SYSTEM)	DP077002SX	DPS77004SX (2-UNIT SYSTEM)
Analog Channels	1, 2	2, 4	1, 2	2, 4	1, 2	2, 4
Analog Bandwidth	50 GHz, 33 GHz	50 GHz, 33 GHz	59 GHz, 33 GHz	59 GHz, 33 GHz	70 GHz, 33 GHz	70 GHz, 33 GHz
Sample Rate	200GS/s, 100GS/s	200GS/s, 100GS/s	200GS/s, 100GS/s	200GS/s, 100GS/s	200GS/s, 100GS/s	200GS/s, 100GS/s
Record Length (Std/Opt)	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints	62.5 Mpoints/1 Gpoints

- Wide range of models from 13 to 70Hz bandwidth with low noise, high ENOB
- Compact package allows positioning of oscilloscope very close to the device under test for accurate measurement results
- UltraSync architecture ensures precise data synchronization and convenient Master/Extension operation for scalability in multi-unit systems
- 200 GS/s sample rate for precise 5 ps timing resolution
- Up to 1 Gpoints Record Length with MultiView Zoom for Quick Navigation and Advanced Search
- Enable comprehensive analysis and presentation of optical modulation systems with Coherent Optical Modulation Analysis software.
- Precise characterization of DUT timing performance with DPOJET Advanced Jitter and Eye Diagram measurement application.

#### SHIPS WITH PRODUCT

Front cover, user manual, TekConnect® to 2.92 mm adapters, DP070000SX software/GPIB reference on instrument SSD, performance verification procedure PDF file, calibration certificate documenting NIST traceability, Z 540-1 compliance and ISO9001, power cord, one-year warranty

#### INSTRUMENT OPTIONS

- Triggering and decoding for 8b/10b, 64/66b
- Extended record length to 125, 250, or 500 Mpoints/ch

#### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Compliance testing for key serial standards
- Memory bus analysis
- Vector signal analysis
- Cable, channel, and probe compensation
- Serial data link analysis
- High speed serial link training analysis
- PAM4 transmitter analysis
- Power analysis
- Jitter analysis
- Limit and mask testing
- See datasheet for a complete list

#### RECOMMENDED PROBES AND ACCESSORIES

- TekConnect® probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, optical, and current probes
- Accessory pouch, mouse, keyboard, static protection wrist strap
- Available hard case and rackmount kit
- See datasheet for a complete list of compatible probes and accessories



## 5 Series MSO Low Profile

In applications that demand extreme channel density, the 5 Series MSO Low Profile sets a new standard for performance. This mixed signal oscilloscope offers 8 input channels (plus AUX Trig) and 12-bit analog-to-digital converters in a compact package, only 3.5 inches high (2U). Replace your oscilloscopes and fit six times more channels into your existing rack space.

MODEL	MS058LP / MS058LPGSA
Input Channels	8 FlexChannel inputs
Digital Channels	8 to 64, in increments of 8 (optional)
Bandwidth	1 GHz
Sample Rate	6.25 GS/s (analog); 6.25 GS/s (digital)
Vertical Resolution	12-bits (7.6 bits ENOB @ 1GHz)

- 8 FlexChannel® inputs with 1 GHz bandwidth
- 12-bit Analog-to-digital converter
- 125 Mpoints record length
- Only 2 rack units (3.5 inches) high
- Aux trigger input
- Designed for high channel count applications. Provides 6x improvement over the channel count density of a typical oscilloscope
- Easy remote control – browser access via IP address
- Easily transition from R&D to manufacturing

### SHIPS WITH PRODUCT

Rackmount attachments, installed  
 Calibration certificate, Installation and safety manual  
 Power cord  
 3-year warranty

### INSTRUMENT OPTIONS

- Security option designed for high security environments
- Arbitrary/Function Generator
- Spectrum View Analysis (Hardware Digital Down Converter)

### ADVANCED ANALYSIS OPTIONS

- Decode/trigger/search for key serial buses
- Power analysis
- Jitter analysis
- Spectrum Analysis
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, isolated, and current probes
- TLP058 general purpose logic probe supports 8 digital channels
- Available hard case and bench conversion kit
- See datasheet for a complete list of compatible probes and accessories



## 6 Series Low Profile Digitizer

Applications requiring high-speed digitizers shouldn't trade-off performance when turning on channels. The 6 Series Low Profile Digitizer sets a new standard by not interleaving sample rate, bandwidth or record length. You get the highest performance digitizer on all channels – all in a 2U space.

MODEL	LPD64
Input Channels	4 SMA inputs
Bandwidth	1GHz to 8 GHz (opt.)
Sample Rate	25GS/s on all channels
Record Length	125 Mpts (std.), 250 Mpts (opt.)
Vertical Resolution	12-bits (8.2 bits ENOB @ 1GHz)

- 1 GHz, 2.5 GHz, 4 GHz, 6 GHz, 8 GHz
- 12-bit Analog-to-digital converter
- 2 GHz RF capture bandwidth (span) with I/Q data offloading
- Only 2U rack units (3.5 inches) high
- Aux trigger input
- Highest ENOB and lowest noise in its class
- Self-Calibration (SPC) can be run with cables/signals attached
- Easy remote control – browser access via IP address
- GitHub repository with programming examples for easy support and integration into test rack systems

### SHIPS WITH PRODUCT

Rack Ready – rackmount comes standard  
 Calibration certificate, Installation and safety manual  
 Power cord  
 1-year Warranty

### INSTRUMENT OPTIONS

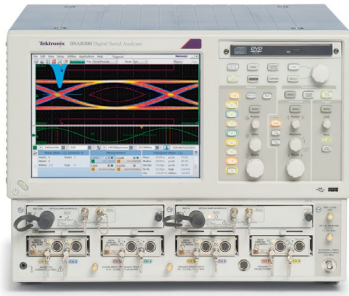
- Security option designed for high security environments
- 250Mpts/ch Extended Record Length
- Arbitrary/Function Generator
- Spectrum View Analysis (Hardware Digital Down Converter)

### ADVANCED ANALYSIS OPTIONS

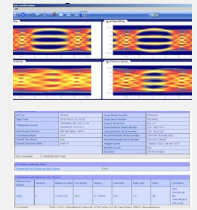
- Decode/trigger/search for key serial buses
- Power analysis
- Jitter analysis
- Spectrum Analysis
- See datasheet for a complete list

### RECOMMENDED PROBES AND ACCESSORIES

- Available hard case and bench conversion kit
- See datasheet for a complete list of compatible probes and accessories



- High Optical Sensitivity, Low Noise, and Wide Dynamic Range of the Optical Sampling Modules
- Remote Samplers or Compact Sampling Extender Module Cables allowing the Sampler to be located at the DUT
- Fully Calibrated Clock Recovery Solutions – No need to manually calibrate for data pick-off losses
- The PAM-4 analysis has full signal path emulation tools that support Continuous Time Linear Equalizer (CTLE), channel emulators described by S-parameters or TDR waveforms, and receiver equalizers Feed Forward (FFE) and Decision Feedback (DFE).
- Design characterization is supported beyond 100GBASE-SR4 compliance requirements for all measurements.



## DSA8300 Series

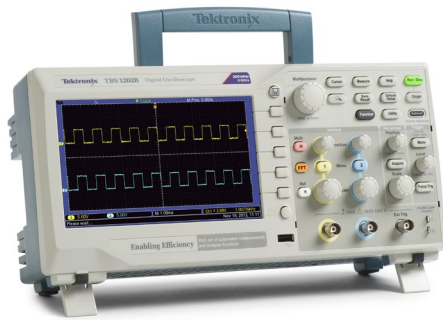
With an industry-leading intrinsic jitter of less than 100 femtoseconds for extremely accurate device characterization, the DSA8300 Series provides comprehensive support for Optical Communications Standards, Time Domain Reflectometry and S-parameters. The DSA8300 Digital Sampling Oscilloscope is a complete high-speed PHY Layer testing platform for data communications from 155 Mb/sec to 100 Gb/sec.

OPTICAL MODULES	80C07B	80C08D	80C10C	80C11B	80C12B	80C14	80C15	80C17	80C18	80C20	80C21
Channels	1	1	1	1	1	1	1	1	2	1	2
Bandwidth	2.5 GHz	12.5 GHz	80+ GHz	30 GHz	12 GHz	14 GHz	32 GHz	>30 GHz	>30 GHz	53 GHz	53 GHz
Clock Recovery (Min/Max)	155 Mb/s - 2.666 Gb/s	9.8 Gb/s - 12.6 Gb/s	Provided by Opt. CRTP and CR286A	9.8 Gb/s - 12.6 Gb/s	Provided by CR125A	Provided by CR175A or CR286A	Provided by CR286A	NA	NA	NA	NA
Filter Rates Supported (Min/Max)	155 Mb/s - 2.5 Gb/s	9.953 Gb/s - 12.5 Gb/s	25.8 Gb/s - 43.018 Gb/s	9.953 - 12.5 Gb/s	155 Mb/s - 11.3 Gb/s	8.500 Gb/s - 14.025 Gb/s	25.781 Gb/s - 28.05 Gb/s	25.781 Gb/s - 28.05 Gb/s	25.781 Gb/s - 28.05 Gb/s	26.388 Gb/s - 54.215 Gb/s	26.388 Gb/s - 54.215 Gb/s

ACCESSORIES MODULES	82A04B	80A02	80A03	80X01	80X02	80A08	CR125A, CR175A, CR286A	80A09
Description	Phase Reference Module	EOS/ESD Protection Module	Probe Adapter Module	1 Meter Extender Cable	2 Meter Extender Cable	Accessory Kit	Clock Recovery Instrument	EOS/ESD Static Protection Device
Functionality	<100 fs RMS timebase jitter	EOS/ESD protection	Sampling Scope Probe Connectivity	Clock Recovery Phase Alignment	Position Module Close To DUT	Connection to DUT and CRU @ 25G	Continues Clock Recovery, 150 Mb/s to 28.6 Gb/s	26 GHz EOS/ESD Static Protection

ELECTRICAL MODULES	80E03	80E07B	80E09B	80E11	80E11X1
Channels	2	2	2	2	1
Vertical Resolution	16 bits	16 bits	16 bits	16 bits	16 bits
Bandwidth	20 GHz	30 GHz	60 GHz	70+ GHz	70+ GHz
Rise Time (10%-90%)	17.5 ps	11.7 ps	5.8 ps	5 ps	5 ps
Monolithic or Remote	Monolithic	Remote (2 meter)	Remote (2 meter)	Monolithic	Monolithic

TDR / ELECTRICAL MODULES	80E04	80E08B	80E10B
Channels	2	2	2
Vertical Resolution	16 bits	16 bits	16 bits
Bandwidth	20 GHz	30 GHz	50 GHz
TDR System Incident Rise Time (10%-90%)	23 ps	18 ps	12 ps
TDR System Reflected Rise Time (10%-90%)	28 ps	20 ps	15 ps
Monolithic or Remote	Monolithic	Remote (2 meter)	Remote (2 meter)



## TBS1000B Series

More features, more scope; the TBS1000B is in a class all on its own. With up to 200 MHz bandwidth, 34 automated measurements, limit testing, data logging, dual-channel frequency counters, waveform trending and sample rates of up to 2 GS/s, the TBS1000B Series is designed for extensive monitoring and analysis activities. It can handle everyday test challenges without challenging your budget.

MODEL	TBS1072B	TBS1102B	TBS1152B	TBS1202B
Analog Channels	2	2	2	2
Analog Bandwidth	70 MHz	100 MHz	150 MHz	200 MHz
Analog Sample Rate (per channel)	1 GS/s	2 GS/s	2 GS/s	2 GS/s

- Two channel instruments
- Extensive monitoring capability using TrendPlot™ testing
- Pass/Fail analysis with built in waveform limit testing
- Automated data logging feature
- Up to 2 GS/s sample rate on all channels
- Dual-channel frequency counters
- Front-panel USB host port and rear-panel USB device port
- TekSmartLab™ supported
- TrendPlot™ function can evaluate signal behavior over extended time periods.
- Thoroughly analyze your waveforms with convenient math tools and 34 automated measurements.

### SHIPS WITH PRODUCT

Two TPP0xx1 200 MHz, 100 MHz or 50 MHz Passive Probes  
 Certificate of Calibration  
 CD with Customer Documentation; Installation & Safety Manual  
 Power Cord  
 5-year Warranty

### RECOMMENDED PROBES AND ACCESSORIES

- BNC probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

**LEARN MORE** 📄 [Download "Reliability by Design" Technical Brief.](#)



## TBS1000B-EDU Series

Meet the world's first dedicated teaching oscilloscope: the TBS1000B-EDU. Not only does it deliver the performance you expect to see in a Tektronix scope, it comes with an innovative course-ware feature that allows students to review lab material, follow step-by-step instructions and document results, all on the oscilloscope. We couldn't make engineering easier, so we made it easier to teach and learn.

MODEL	TBS1072B-EDU	TBS1102B-EDU	TBS1152B-EDU	TBS1202B-EDU
Analog Channels	2	2	2	2
Analog Bandwidth	70 MHz	100 MHz	150 MHz	200 MHz
Analog Sample Rate (per channel)	1 GS/s	2 GS/s	2 GS/s	2 GS/s

- Two-channel instruments
- Integrated course ware feature—perform labs directly on the oscilloscope
- Autoset enable/disable capability
- Included PC editor tool for easy lab creation
- Up to 2 GS/s sample rate on all channels
- Dual-channel frequency counters
- 34 automated measurements and FFT analysis
- TekSmartLab™ supported
- The Courseware Resource Center is an interactive, multi-lingual website where educators can share lab material and ideas.
- The FFT function can show both frequency and time domain waveforms simultaneously.

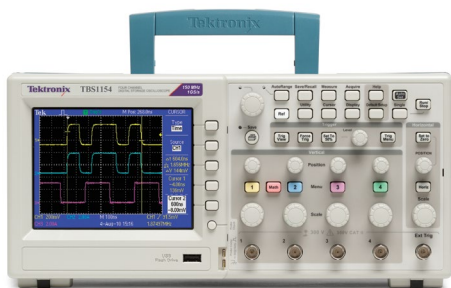
### SHIPS WITH PRODUCT

Two TPP0xx1 200 MHz, 100 MHz or 50 MHz, Passive Probes  
 Certificate of Calibration  
 CD with Customer Documentation  
 Education CD with Course Editor SW and Lab Examples  
 Installation & Safety Manual  
 Power Cord  
 5-year Warranty

### RECOMMENDED PROBES AND ACCESSORIES

- BNC probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

**HELP STUDENTS** 📄 [Master the use of an oscilloscope with the included courseware software and labs. Click here to learn more.](#)



## TBS1000 Series

Usually, entry-level instruments are as light in features as they are in price. But Tektronix TBS1000 Series aren't usual instruments. Ideal for students, hobbyists or any person or organization on a tight budget, TBS1000 Series oscilloscopes deliver outstanding performance, including best-in-class digital real-time sampling, pass/fail testing, and familiar, easy-to-use controls. All at a price that's equally impressive.

MODEL	TBS1064	TBS1104	TBS1154
Analog Channels	4	4	4
Analog Bandwidth	60 MHz	100 MHz	150 MHz
Analog Sample Rate (per channel)	1 GS/s	1 GS/s	1 GS/s

- Four-channel instruments
- 1 GS/s sample rate on all channels
- 7-inch WVGA high-res display
- 16 automated measurements, and FFT analysis
- Built-in waveform limit testing
- Built-in help system and probe check wizard
- Front-panel USB host port and rear-panel USB device port
- TekSmartLab™ supported
- Accurately capture signals with at least 10X oversampling on all channels with Digital Real-Time Sampling technology.
- Quickly store and transfer your waveforms and settings with the front panel USB port.

### SHIPS WITH PRODUCT

Four TPP0x01 100 MHz or 200 MHz, 10X Passive Probes  
 OpenChoice® Desktop Software  
 Educator Classroom and Lab Resource CD  
 Calibration Certificate, Quick Reference Manual, & Documentation on CD  
 Power Cord  
 5-year Warranty

### RECOMMENDED PROBES AND ACCESSORIES

- BNC probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Available hard case, soft case, and rackmount kit
- See datasheet for a complete list of compatible probes and accessories

**LEARN MORE** 📄 Download the Technical Brief "Be Sure to Capture the Complete Picture".



## TBS2000B Series

DATA SHEET

The TBS2000B Series of Oscilloscopes with up to 200 MHz bandwidth, a 9-inch WVGA display, 5-million-point record length and 2 GS/s sample rate, capture and display significantly more signal to help you debug and validate the designs faster. New front-end design enables more accurate measurements and features for educators makes it perfect for the classroom.

MODEL	TBS2072B	TBS2074B	TBS2102B	TBS2104B	TBS2202B	TBS2204B
Analog Channels	2	4	2	4	2	4
Analog Bandwidth	70 MHz	70 MHz	100 MHz	100 MHz	200 MHz	200 MHz
Analog Sample Rate (per channel)	2 GS/s - Half Channel	2 GS/s - Half Channel	2 GS/s - Half Channel	2 GS/s - Half Channel	2 GS/s - Half Channel	2 GS/s - Half Channel
	1 GS/s - All Channels	1 GS/s - All Channels	1 GS/s - All Channels	1 GS/s - All Channels	1 GS/s - All Channels	1 GS/s - All Channels

- Large, 9-inch display, with 15 horizontal divisions lets you see more of your signal
- Up to 200 MHz bandwidth and four analog channels
- 32 automated measurements, and FFT function for quick waveform analysis
- TekVPI® probe interface supports active, differential, and current probes with automatic scaling and units
- Search and Mark features for easy identification of events that occur in the acquired waveform
- Built-in scope intro handbook provides operating instructions and oscilloscope fundamentals

### SHIPS WITH PRODUCT

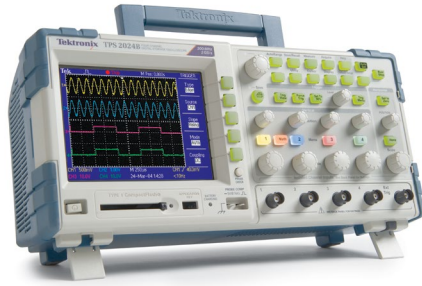
TPP0100 100 MHz, 10x passive probe (one per analog channel) or TPP0200 200 MHz, 10x passive probe (one per analog channel)  
 Installation and safety manual  
 Programmer manual, available on documentation CD and on Tek Web  
 Power Cord

Calibration certificate documenting traceability to National Metrology Institute(s) and ISO9001 quality system registration

### RECOMMENDED PROBES AND ACCESSORIES

- TekVPI probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Available soft case
- See datasheet for a complete list of compatible probes and accessories

**LEARN MORE** 📄 Download the "Anatomy of Digital Oscilloscopes" Poster which shows how parts in an oscilloscope work together.



## TPS2000B Series

Great performance goes beyond the lab. Make floating or differential measurements with up to four isolated channels. Tackle challenging environments with back-lit buttons and optional power analysis software. Capture signals with Digital Real-Time Sampling.

MODEL	TPS2012B	TPS2014B	TPS2024B
Analog Channels	2	4	4
Analog Bandwidth	100 MHz	100 MHz	200 MHz
Analog Sample Rate	1 GS/s	1 GS/s	2 GS/s

- 10X oversampling on all channels
- 4 isolated analog channels
- 11 automated measurements and FFT analysis
- Optional power analysis software
- Safely and easily make floating measurements with the four isolated channels.
- Battery pack gives you up to 4 hours of portable operation. Hot-swap the pack for 4 more hours!

### SHIPS WITH PRODUCT

One TPP0101 100 MHz, 10X Passive Probe Per Analog Channel (TPS2012B & TPS2014B)  
 One TPP0201 200 MHz, 10X Passive Probe Per Analog Channel (TPS2024B)  
 OpenChoice® Desktop Software  
 RS-232 to USB Adapter Cable  
 One Lithium-Ion Battery with 4-hour Battery Life  
 Calibration Certificate, Quick Reference Manual, & Documentation on CD  
 Front Panel Cover, AC Adapter with Power Cord  
 3-year Warranty

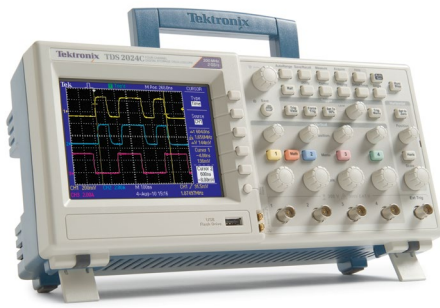
### ADVANCED ANALYSIS OPTIONS

- Power analysis

### RECOMMENDED PROBES AND ACCESSORIES

- Isolated BNC probe interface; compatible with a range of passive, differential, high voltage, and current probes
- Available hard case, soft case
- Additional battery, external charger
- See datasheet for a complete list of compatible probes and accessories

**LEARN MORE** 📄 Download “Fundamentals of Floating Measurements and Isolated Input Oscilloscopes” Application Note.



## TDS2000C Series

Big performance has never been so small. Featuring Digital Real-Time Sampling, you can trust your scope to accurately capture your signal. Add in USB connectivity, 16 automated measurements and even a built-in help system; this compact oscilloscope helps you get more done in less time. It's true: big things do come in small packages.

MODEL	TDS2012C	TDS2014C	TDS2022C	TDS2024C
Analog Channels	2	4	2	4
Analog Bandwidth	100 MHz	100 MHz	200 MHz	200 MHz
Analog Sample Rate	2 GS/s	2 GS/s	2 GS/s	2 GS/s

- 10X oversampling on all channels
- Bright color display
- 16 automated measurements and FFT analysis
- Built-in help system and probe check wizard
- Front-panel USB host port and rear-panel USB device port
- Lifetime Warranty<sup>1</sup>
- TekSmartLab™ supported
- Accurately capture signals with at least 10X over-sampling on all channels with Digital Real-Time Sampling technology.
- Easily check if your waveforms pass or fail your specifications with built-in waveform limit testing.

### SHIPS WITH PRODUCT

One TPP0x01 100 MHz or 200 MHz, 10X Passive Probe Per Analog Channel  
 OpenChoice® Desktop Software  
 Calibration Certificate, Quick Reference Manual and Documentation on CD  
 Power Cord  
 Lifetime Warranty<sup>1</sup>

### RECOMMENDED PROBES AND ACCESSORIES

- BNC probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Available hard case, soft case
- See datasheet for a complete list of compatible probes and accessories

## TDS3000C Series

Performance meets portability. Featuring up to 500 MHz bandwidth and optional battery-powered operation, this oscilloscope is as capable as it is convenient. Capture fast-changing signals with Digital Real-Time Sampling. Maximize efficiency with WaveAlert® Anomaly Detection and 25 automated measurements. Performance and versatility—turns out you can take it with you.

MODEL	TDS3012C	TDS3014C	TDS3032C
Analog Channels	2	4	2
Analog Bandwidth	100 MHz	100 MHz	300 MHz
Analog Sample Rate	1.25 GS/s	1.25 GS/s	2.5 GS/s

MODEL	TDS3034C	TDS3052C	TDS3054C
Analog Channels	4	2	4
Analog Bandwidth	300 MHz	500 MHz	500 MHz
Analog Sample Rate	2.5 GS/s	5 GS/s	5 GS/s

- 10 kpoints record length on all channels, all the time
- 3,600 wfms max. waveform capture rate with DPO technology
- 25 automated measurements and FFT analysis
- Front-panel USB host port and optional rear-panel Ethernet, GPIB, and RS-232 ports
- Optional battery pack gives you up to 3 hours of portable operation.
- Accurately capture signals with at least 5X over-sampling on all channels with Digital Real-Time Sampling technology.

### SHIPS WITH PRODUCT

One P6139B 500 MHz, 10X Passive Probe Per Analog Channel  
 OpenChoice® Desktop Software  
 Calibration Certificate, Quick Reference Manual, & Documentation on CD  
 Front Panel Cover, Power Cord  
 3-year Warranty

### ADVANCED ANALYSIS OPTIONS

- Limit Testing
- Mask Testing
- HDTV and Custom Video Triggering

### RECOMMENDED PROBES AND ACCESSORIES

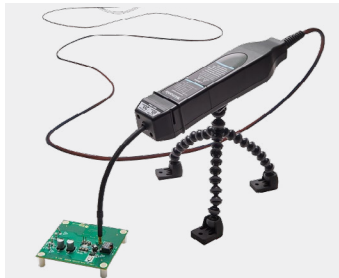
- TekProbe® probe interface; compatible with a wide range of passive, active, differential, high voltage, and current probes
- Battery pack and charger
- Available soft case
- See datasheet for a complete list of compatible probes and accessories

# OSCILLOSCOPE PROBES AND ACCESSORIES

Tektronix probes and accessories are perfectly matched to our industry-leading oscilloscopes. With over 100 choices available, you will find the probe you need. Need help finding the right probe for your application? The online Tektronix Probe Selector Tool will guide you through a few easy questions to match your need to the right probe.



LEARN MORE  
ON THE GO!



## Isolated Probes

- High-resolution measurements in the presence of common mode signals or noise
- Up to 1 GHz bandwidth
- Complete galvanic isolation
- 1 Million to 1 (120 dB) of common mode rejection at 100 MHz

[tek.com/isolated-measurement-systems](http://tek.com/isolated-measurement-systems)



## Power Rail Probes

- Bandwidth up to 4 GHz
- Offset range up to  $\pm 60$  V
- Lowest noise
- Flexible connectivity

[tek.com/power-rail-probes](http://tek.com/power-rail-probes)



## High Voltage Differential Probes

- Dynamic range to  $\pm 6000$  V
- Bandwidth up to 200 MHz
- Most extensive set of probe accessories

[tek.com/differential-probe-high-voltage](http://tek.com/differential-probe-high-voltage)



## Current Probes

- Easy to use and accurate AC/DC current measurements
- DC up to 2 GHz
- Amplitude measurements from 1 mA to 2,000 A
- Split core and solid core construction

[tek.com/current-probe](http://tek.com/current-probe)



## Low Voltage Differential Probes

- Bandwidth up to 33 GHz
- Easily measure differential signals
- TriMode™ probes let you easily switch between differential, single-ended, and common mode
- High common mode rejection ratio (CMRR)
- Wide range of probe tips for easier circuit access

[tek.com/differential-probe-low-voltage](http://tek.com/differential-probe-low-voltage)



## Low Voltage Single-ended Probes

- Bandwidth up to 4 GHz
- True signal reproduction and fidelity
- Low input capacitance: down to  $< 0.8$  pF
- Small, compact probe heads for probing small geometry circuit elements

[tek.com/low-voltage-probe-single-ended](http://tek.com/low-voltage-probe-single-ended)



## Passive Probes

- Best-in-class bandwidth up to 1 GHz
- Best-in-class input capacitance as low as 3.9 pF, which minimizes probe loading effects
- Rugged and reliable
- High voltage versions with dynamic range up to 2500 V

[tek.com/passive-probe](http://tek.com/passive-probe)

[tek.com/high-voltage-probe-single-ended](http://tek.com/high-voltage-probe-single-ended)



## Optical

- DPO70E1/DPO70E2 - high bandwidth optical probes, DC to 33/59 GHz with broad wavelength support from 750-1650 nm / 1200-1650 nm
- P6701B/P6703B - DC to 1.0/1.2 GHz with broad wavelength support: 500-950 nm/1100-1650 nm

[tek.com/optical-probe](http://tek.com/optical-probe)

[tek.com/high-bandwidth-optical-probe](http://tek.com/high-bandwidth-optical-probe)



# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		MSO/DPO70000C/DX Series			
		Serial Standard	Decode & Search	Serial Trigger	Compliance & Debug
Embedded	I2C		SR-EMBD	SR-EMBD	-
	SPI		SR-EMBD	SR-EMBD	-
	RS-232/422/485/UART		SR-COMP	SR-COMP	-
Automotive	CAN		SR-AUTO	SR-AUTO	-
	LIN		SR-AUTO	SR-AUTO	-
	FlexRay		SR-AUTO	SR-AUTO	-
	MOST		-	-	MOST
	Automotive Ethernet		-	-	BRR
Aero	MIL-STD-1553B		SR-AERO	SR-AERO	-
Computer / Peripherals	USB 2.0		SR-USB	SR-USB (LS, FS)	USB2
	USB 3.0		SR-USB	-	USB3, USBSSP-TX
	USB Power		-	-	USBPWR
	MIPI C-PHY		-	-	C-PHY
	MIPI D-PHY		SR-DPHY	-	D-PHY, DPHY12
	MIPI M-PHY		-	-	M-PHY, M-PHYTX
	PCIe		SR-PCIE	SR-PCIE	PCE3, PCE4
	DisplayPort		-	-	DP12, DP14
	Embedded DisplayPort		-	-	EDP, EDP14
	HDMI		-	-	HT3, HDM, HD21
	SATA		-	-	SATA-RSG, SATA-TSG
	SAS3		-	-	SAS3, SAS3-TSG, SAS3-TSGW
	SAS4		-	-	SAS4-TSG
	Thunderbolt		-	-	TBT-TX
	LVDS		-	-	LVDSTX
Memory	DDR		DDRA, DDR5SYS	-	DDRA, DDR5SYS
	LPDDR		DDR-LP4	-	DDR-LP4
Datacom	Ethernet		SR-ENET	-	CMENET3, ET3, NBASET, XBGT2
	Comm. Mask Testing		-	-	MTH
	Fibre Channel		-	-	FC-16G
	10GBASE-KR/KR4		-	-	10G-KR
	40GBASE-CR4		-	-	40G-CR4
	100G Ethernet TX		-	-	100G-TXE
	400G Ethernet TX		-	-	400G-TXE
	SFP+/QSFP+		-	-	SFP-TX, SFP-WDP
Serial Analysis	Custom Serial		SR-CUST	-	-
	8b/10b		SR-810B, ST6G	SR-810B, ST6G	-
	NRZ Serial		-	ST6G	-
	64b/66b		-	-	-
	PAM4		-	-	PAM4, PAM4-0
	Serial Data Link Analysis		-	-	SDLA64
	Jitter, Noise & Eye Diagram Analysis		-	-	DJA, DJAN
	High-Speed Serial Error Detector		-	-	ERRDT
	High-Speed Serial Link Training Analysis		-	-	-
	Signal Correct		-	-	SC

DPO70000SX Series		
Decode & Search	Serial Trigger	Compliance & Debug
SR-EMBD	SR-EMBD	-
SR-EMBD	SR-EMBD	-
SR-COMP	SR-COMP	-
SR-AUTO	SR-AUTO	-
SR-AUTO	SR-AUTO	-
SR-AUTO	SR-AUTO	-
-	-	MOST
-	-	BRR
SR-AERO	SR-AERO	-
SR-USB	SR-USB (LS, FS)	USB2
-	-	USB3, USBSSP-TX
-	-	USBPWR
-	-	C-PHY
SR-DPHY	-	D-PHY, DPHY12
-	-	M-PHY, M-PHYTX
SR-PCIE	SR-PCIE	PCE3, PCE4, PCE5
-	-	DP12, DP14
-	-	EDP, EDP14
-	-	HT3, HDM, HD21
-	-	SATA-TSG
-	-	SAS3-TSG, SAS3-TSGW
-	-	SAS4-TSG
-	-	-
-	-	-
DDRA, DDR5SYS	-	DDRA, DDR5SYS
DDR-LP4	-	DDR-LP4
SR-ENET	-	CMENET3, ET3, NBASET, XBGT2
-	-	-
-	-	FC-16G
-	-	10G-KR
-	-	40G-CR4
-	-	100G-TXE
-	-	400G-TXE
-	-	SFP-TX, SFP-WDP
SR-CUST	-	-
ST14G	ST14G	-
-	ST14G	-
SR-6466	SR-6466	-
-	-	PAM4, PAM4-0
-	-	SDLA64
-	-	DJA, DJAN
-	-	BITERR
-	-	HSSLTA
-	-	SC

# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		6 Series MSO			5 Series MSO			
		Serial Standard	Decode & Search	Serial Trigger	Compliance Test	Decode & Search	Serial Trigger	Compliance Test
Embedded	I <sup>2</sup> C		6-SREMBD	6-SREMBD	-	5-SREMBD	5-SREMBD	-
	SPI		6-SREMBD	6-SREMBD	-	5-SREMBD	5-SREMBD	-
	I <sup>3</sup> C		6-SRI3C	-	-	5-SRI3C	-	-
	RS-232/422/485/UART		6-SRCOMP	6-SRCOMP	-	5-SRCOMP	5-SRCOMP	-
	SPMI		6-SRPM	6-SRPM	-	5-SRPM	5-SRPM	-
	I <sup>2</sup> S		6-SRAUDIO	6-SRAUDIO	-	5-SRAUDIO	5-SRAUDIO	-
Automotive	CAN		6-SRAUTO	6-SRAUTO	-	5-SRAUTO	5-SRAUTO	-
	CAN FD		6-SRAUTO	6-SRAUTO	-	5-SRAUTO	5-SRAUTO	-
	LIN		6-SRAUTO	6-SRAUTO	-	5-SRAUTO	5-SRAUTO	-
	FlexRay		6-SRAUTO	6-SRAUTO	-	5-SRAUTO	5-SRAUTO	-
	MOST		-	-	-	-	-	-
	PSI5		6-SRPSI5	-	-	5-SRPSI5	-	-
	SENT		6-SRAUTOSEN	6-SRAUTOSEN	-	5-SRAUTOSEN	5-SRAUTOSEN	-
	Automotive Ethernet		6-SRAUTOEN1	-	6-CMAUTOEN, 6-CMAUTOEN10, 6-AUTOEN-SS, 6-AUTOEN-BND	5-SRAUTOEN1	-	5-CMAUTOEN, 5-CMAUTOEN10, 5-AUTOEN-SS, 5-AUTOEN-BND
Aero	ARINC 429		6-SRAERO	6-SRAERO	-	5-SRAERO	5-SRAERO	-
	MIL-STD-1553B		6-SRAERO	6-SRAERO	-	5-SRAERO	5-SRAERO	-
	SpaceWire		6-SRSPACEWIRE	-	-	5-SRSPACEWIRE	-	-
Computer / Peripherals	USB 2.0		6-SRUSB2	6-SRUSB2	6-CMUSB2	5-SRUSB2	5-SRUSB2	5-CMUSB2
	USB 3.0		-	-	-	-	-	-
	MIPI D-PHY		-	-	6-CMDPHY	-	-	-
	MIPI M-PHY		-	-	-	-	-	-
	PCIe		-	-	-	-	-	-
	DisplayPort		-	-	-	-	-	-
	eUSB2		6-EUSB2	-	-	5-EUSB2	-	-
	HDMI		-	-	-	-	-	-
	PSI5		6-PSI5	-	-	5-PSI5	-	-
	SATA		-	-	-	-	-	-
	SAS3		-	-	-	-	-	-
	SVID		6-SVID	-	-	5-SVID	-	-
	Thunderbolt		-	-	-	-	-	-
	LVDS		-	-	6-DBLVDS (debug and analysis)	-	-	5-DBLVDS (debug and analysis)
Memory	DDR		-	-	6-DBDDR3 (DDR3 debug and analysis), 6-CMDDR3	-	-	-
Datacom	Ethernet		6-SRENET	6-SRENET	6-CMENET, 6-CMNBASET, 6-CMXGBT	5-SRENET	5-SRENET	5-CMENET
	Industrial Ethernet		-	-	6-CMINDUEN10	-	-	5-CMINDUEN10
	Comm. Mask Testing		-	-	-	-	-	-
	Fibre Channel		-	-	-	-	-	-
	MDIO		6-MDIO	-	-	5-MDIO	-	-
	10GBASE-KR/KR4		-	-	-	-	-	-
	SFP+/QSFP+		-	-	-	-	-	-
Serial Analysis	Custom Serial		-	-	-	-	-	-
	8b/10b		6-SR8B10B	-	-	5-SR8B10B	-	-
	NRZ Serial		6-SRNRZ	-	-	5-SRNRZ	-	-
	PAM3		-	-	6-PAM3	-	-	5-PAM3
	PAM4		-	-	-	-	-	-
	Serial Data Link Analysis		-	-	-	-	-	-
	Jitter & Eye Diagram Analysis		-	-	6-DJA	-	-	5-DJA

# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		4 Series MSO			MDO4000C Series			
		Serial Standard	Decode & Search	Serial Trigger	Compliance Test	Decode & Search	Serial Trigger	Compliance Test
Embedded	I <sup>2</sup> C		4-SREMBD	4-SREMBD	-	DPO4EMBD	DPO4EMBD	-
	SPI		4-SREMBD	4-SREMBD	-	DPO4EMBD	DPO4EMBD	-
	I3C		4-SRI3C	-	-	-	-	-
	RS-232/422/485/UART		4-SRCOMP	4-SRCOMP	-	DPO4COMP	DPO4COMP	-
	SPMI		4-SRPM	4-SRPM	-	-	-	-
	I <sup>2</sup> S		4-SRAUDIO	4-SRAUDIO	-	DPO4AUDIO	DPO4AUDIO	-
Automotive	CAN		4-SRAUTO	4-SRAUTO	-	DPO4AUTO	DPO4AUTO	-
	CAN FD		4-SRAUTO	4-SRAUTO	-	DPO4AUTO	DPO4AUTO	-
	LIN		4-SRAUTO	4-SRAUTO	-	DPO4AUTO	DPO4AUTO	-
	FlexRay		4-SRAUTO	4-SRAUTO	-	DPO4AUTOMAX	DPO4AUTOMAX	-
	MOST		-	-	-	-	-	-
	PSI5		4-SRPSI5	-	-	-	-	-
	SENT		4-SRAUTOSEN	4-SRAUTOSEN	-	-	-	-
	Automotive Ethernet		-	-	-	-	-	-
Aero	ARINC 429		4-SRAERO	4-SRAERO	-	DPO4AERO	DPO4AERO	-
	MIL-STD-1553B		4-SRAERO	4-SRAERO	-	DPO4AERO	DPO4AERO	-
	SpaceWire		4-SRSPACEWIRE	-	-	-	-	-
Computer / Peripherals	USB 2.0		4-SRUSB2	4-SRUSB2	-	DPO4USB	DPO4USB	-
	USB 3.0		-	-	-	-	-	-
	MIPI D-PHY		-	-	-	-	-	-
	MIPI M-PHY		-	-	-	-	-	-
	PCIe		-	-	-	-	-	-
	DisplayPort		-	-	-	-	-	-
	eUSB2		4-EUSB2	-	-	-	-	-
	HDMI		-	-	-	-	-	-
	PSI5		4-PSI5	-	-	-	-	-
	SATA		-	-	-	-	-	-
	SAS3		-	-	-	-	-	-
	SVID		4-SVID	-	-	-	-	-
	Thunderbolt		-	-	-	-	-	-
	LVDS		-	-	-	-	-	-
Memory	DDR		-	-	-	-	-	-
Datacom	Ethernet		4-SRENET	4-SRENET	-	DPO4ENET	DPO4ENET	-
	Industrial Ethernet		-	-	-	-	-	-
	Comm. Mask Testing		-	-	-	-	-	DPO4LMT
	Fibre Channel		-	-	-	-	-	-
	MDIO		4-MDIO	-	-	-	-	-
	10GBASE-KR/KR4		-	-	-	-	-	-
	SFP+/QSFP+		-	-	-	-	-	-
Serial Analysis	Custom Serial		-	-	-	-	-	-
	8b/10b		-	-	-	-	-	-
	NRZ Serial		4-SRNRZ	-	-	-	-	-
	PAM4		-	-	-	-	-	-
	Serial Data Link Analysis		-	-	-	-	-	-
	Jitter & Eye Diagram Analysis		-	-	-	-	-	-

# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		3 Series MDO			MDO3000 Series			
		Serial Standard	Decode & Search	Serial Trigger	Compliance Test	Decode & Search	Serial Trigger	Compliance Test
Embedded	I <sup>2</sup> C		3-SREMBD	3-SREMBD	-	MDO3EMBD	MDO3EMBD	-
	SPI		3-SREMBD	3-SREMBD	-	MDO3EMBD	MDO3EMBD	-
	I3C		-	-	-	-	-	-
	RS-232/422/485/UART		3-SRCOMP	3-SRCOMP	-	MDO3COMP	MDO3COMP	-
	SPMI		-	-	-	-	-	-
	I <sup>2</sup> S		3-SRAUDIO	3-SRAUDIO	-	MDO3AUDIO	MDO3AUDIO	-
Automotive	CAN		3-SRAUTO	3-SRAUTO	-	MDO3AUTO	MDO3AUTO	-
	CAN FD		3-SRAUTO	3-SRAUTO	-	MDO3AUTO	MDO3AUTO	-
	LIN		3-SRAUTO	3-SRAUTO	-	MDO3AUTO	MDO3AUTO	-
	FlexRay		3-SRAUTO	3-SRAUTO	-	MDO3FLEX	MDO3FLEX	-
	MOST		-	-	-	-	-	-
	PSI5		-	-	-	-	-	-
	SENT		-	-	-	-	-	-
	Automotive Ethernet		-	-	-	-	-	-
Aero	ARINC 429		3-SRAERO	3-SRAERO	-	-	-	-
	MIL-STD-1553B		3-SRAERO	3-SRAERO	-	MDO3AERO	MDO3AERO	-
	SpaceWire		-	-	-	-	-	-
Computer / Peripherals	USB 2.0		3-SRUSB2	3-SRUSB2	-	MDO3USB	MDO3USB	-
	USB 3.0		-	-	-	-	-	-
	MIPI D-PHY		-	-	-	-	-	-
	MIPI M-PHY		-	-	-	-	-	-
	PCIe		-	-	-	-	-	-
	DisplayPort		-	-	-	-	-	-
	HDMI		-	-	-	-	-	-
	SATA		-	-	-	-	-	-
	SAS3		-	-	-	-	-	-
	Thunderbolt		-	-	-	-	-	-
	LVDS		-	-	-	-	-	-
	Memory	DDR		-	-	-	-	-
Datacom	Ethernet		-	-	-	-	-	-
	Industrial Ethernet		-	-	-	-	-	-
	Comm. Mask Testing		-	-	-	-	-	MDO3LMT
	Fibre Channel		-	-	-	-	-	-
	10GBASE-KR/KR4		-	-	-	-	-	-
	SFP+/QSFP+		-	-	-	-	-	-
Serial Analysis	Custom Serial		-	-	-	-	-	-
	8b/10b		-	-	-	-	-	-
	NRZ Serial		-	-	-	-	-	-
	PAM4		-	-	-	-	-	-
	Serial Data Link Analysis		-	-	-	-	-	-
	Jitter & Eye Diagram Analysis		-	-	-	-	-	-

# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		MSO/DP02000B Series			MSO/DP05000B Series			
		Serial Standard	Decode & Search	Serial Trigger	Compliance Test	Decode & Search	Serial Trigger	Compliance Test
Embedded	I <sup>2</sup> C		DPO2EMBD	DPO2EMBD	-	SR-EMBD	SR-EMBD	-
	SPI		DPO2EMBD	DPO2EMBD	-	SR-EMBD	SR-EMBD	-
	I3C		-	-	-	-	-	-
	RS-232/422/485/UART		DPO2COMP	DPO2COMP	-	SR-COMP	SR-COMP	-
	SPMI		-	-	-	-	-	-
	I <sup>2</sup> S		-	-	-	-	-	-
Automotive	CAN		DPO2AUTO	DPO2AUTO	-	SR-AUTO	SR-AUTO	-
	CAN FD		-	-	-	-	-	-
	LIN		DPO2AUTO	DPO2AUTO	-	SR-AUTO	SR-AUTO	-
	FlexRay		-	-	-	SR-AUTO	SR-AUTO	-
	MOST		-	-	-	-	-	MOST
	PSI5		-	-	-	-	-	-
	SENT		-	-	-	-	-	-
	Automotive Ethernet		-	-	-	-	-	BRR
Aero	ARINC 429		MD03AERO	MD03AERO	-	-	-	-
	MIL-STD-1553B		-	-	-	SR-AERO	SR-AERO	-
	SpaceWire		-	-	-	-	-	-
Computer / Peripherals	USB 2.0		-	-	-	SR-USB	SR-USB	USB2
	USB 3.0		-	-	-	-	-	-
	MIPI D-PHY		-	-	-	SR-DPHY	-	-
	MIPI M-PHY		-	-	-	-	-	-
	PCIe		-	-	-	SR-PCIE	-	-
	DisplayPort		-	-	-	-	-	-
	HDMI		-	-	-	-	-	-
	SATA		-	-	-	-	-	-
	SAS3		-	-	-	-	-	-
	Thunderbolt		-	-	-	-	-	-
	LVDS		-	-	-	-	-	-
Memory	DDR		-	-	-	-	-	DDRA
Datacom	Ethernet		-	-	-	SR-ENET	SR-ENET	CMENET3
	Industrial Ethernet		-	-	-	-	-	-
	Comm. Mask Testing		-	-	-	-	-	MTM
	Fibre Channel		-	-	-	-	-	-
	10GBASE-KR/KR4		-	-	-	-	-	-
	SFP+/QSFP+		-	-	-	-	-	-
Serial Analysis	Custom Serial		-	-	-	SR-CUST	-	-
	8b/10b		-	-	-	SR-810B	-	-
	NRZ Serial		-	-	-	-	-	-
	PAM4		-	-	-	-	-	-
	Serial Data Link Analysis		-	-	-	-	-	-
	Jitter & Eye Diagram Analysis		-	-	-	-	-	DJA (DJE incl. std), DJAN

# SERIAL SUPPORT BY OSCILLOSCOPE SERIES AND REQUIRED OPTIONAL SOFTWARE

		DP07000C Series			
		Serial Standard	Decode & Search	Serial Trigger	Compliance Test
Embedded	I <sup>2</sup> C		SR-EMBD	SR-EMBD	-
	SPI		SR-EMBD	SR-EMBD	-
	I3C		-	-	-
	RS-232/422/485/UART		SR-COMP	SR-COMP	-
	SPMI		-	-	-
	I <sup>2</sup> S		-	-	-
Automotive	CAN		SR-AUTO	SR-AUTO	-
	CAN FD		-	-	-
	LIN		SR-AUTO	SR-AUTO	-
	FlexRay		SR-AUTO	SR-AUTO	-
	MOST		-	-	MOST
	PSI5		-	-	-
	SENT		-	-	-
	Automotive Ethernet		-	-	BRR
Aero	ARINC 429		-	-	-
	MIL-STD-1553B		SR-AERO	SR-AERO	-
	SpaceWire		-	-	-
Computer / Peripherals	USB 2.0		SR-USB	SR-USB (LS, FS)	USB2
	USB 3.0		-	-	-
	USB Power		-	-	USBPWR
	MIPI D-PHY		SR-DPHY	-	D-PHY TEKEXP Opt. D-PHYTX
	MIPI M-PHY		-	-	-
	PCIe		SR-PCIE	-	-
	DisplayPort		-	-	-
	HDMI		-	-	-
	SATA		-	-	-
	SAS3		-	-	-
	Thunderbolt		-	-	-
LVDS		-	-	LVDSTX	
Memory	DDR		-	-	DDRA
Datacom	Ethernet		SR-ENET	-	CMENET3, XBGT2, NBASET
	Industrial Ethernet		-	-	-
	Comm. Mask Testing		-	-	MTM
	Fibre Channel		-	-	-
	10GBASE-KR/KR4		-	-	-
	SFP+/QSFP+		-	-	-
Serial Analysis	Custom Serial		SR-CUST	-	-
	8b/10b		SR-810B	ST1G	-
	NRZ Serial		-	ST1G	-
	PAM4		-	-	-
	Serial Data Link Analysis		-	-	-
	Jitter & Eye Diagram Analysis		-	-	DJA (DJE incl. std), DJAN

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Rev. 02.2018

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04/20 SBG 46W-31080-8

