Superior Measurement Fidelity. Powerful Analysis. Uncompromised Usability.



► Oscilloscope Selection Made Easy

	Channels	Bandwidth	Rise Time	Sample Rate	Oscilloscope Type	Record Length	Trigger Types	Connectivity	Waveform Math and Analysis	Applications
TDS5000 Series	2, 4	350 MHz to 1 GHz	1.15 ns to 300 ps	5 GS/s	DPO/DPX up to 100,000 wfms/s	8 MB	• Edge • Logic (Pattern, State, Setup/Hold) • Pulse (Glitch, Width, Runt, Timeout, Transition) • Video • Window • Trigger Delay by Time/Events	Extended	Basic (Extended optional)	Digital Design and Debug Power Measurements Video Design and Debug DVD Analysis Jitter and Timing Analysis
TDS6000 Series	4	4 GHz, 6 GHz	100 ps, 70 ps	20 GS/s on 2 10 GS/s on 4	DSO	250 kB	• Edge • Logic (Pattern, State, Setup/Hold) • Pulse (Glitch, Width, Runt, Timeout, Transition) • Comm • Serial Pattern	Extended	Extended	Validation/ Characterization of High-speed Digital Designs Utter and Timing Analysis High-energy Physics
TDS7000/B Series	4	500 MHz to 7 GHz	800 ps to 60 ps	5 GS/s to 20 GS/s	DPO/DPX more than 400,000 wfms/s	64 MB	• Edge • Logic (Pattern, State, Setup/Hold) • Pulse (Glitch, Width, Runt, Timeout, Transition)	Extended	Extended	Verification/Debug/ Characterization of Sophisticated Designs Jitter and Timing Analysis Electrical Compliance Testing Spectral Analysis
TDS8000B Series	Up to 8	70+ GHz	5.0 ps	200 kS/s (Sequential)	Sampling	4 kB	*Edge * Internal Clock * Clock Recovery	Extended	Extended	Device Characterization and Semiconductor Testing Impedance and Crosstalk Characterization using TDR
CSA7000/B Series	4	1.5 GHz, 4 GHz	240 ps, 100 ps	20 GS/s	DPO/DPX more than 400,000 wfms/s	64 MB	• Edge • Logic (Pattern, State, Setup/Hold) • Pulse (Glitch, Width, Runt, Timeout, Transition)	Extended	Extended	Design Development Optical and Electrical Compliance Testing Margin Verification Jitter and Timing Analysis
CSA8000B Series	Up to 8	70+ GHz	5.0 ps	200 kS/s (Sequential)	Sampling	4 kB	• Edge • Internal Clock • Clock Recovery	Extended	Extended	Optical Design and Manufacturing Test High-speed Tele and Data Communications Signal Analysis and Compliance Testing

Specifications may vary based on the model selected within the product families listed above.

Connectivity

Connectivity
Basic - RS-232
Advanced - Basic, plus GPIB, Centronics, Floppy Disk
Extended - Advanced, plus LAN, Ethernet; May include USB, PCMCIA,
CD-ROM, Open access to OpenChoice* platform

Waveform Math and Analysis

Basic – Simple waveform math Advanced – Advanced waveform math, FFT Extended – Advanced waveform math, FFT or Spectral, Compatibility with Windows analysis and productivity software



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► Optical Sampling (10 Gb/s) Module

	Standards Supported	Features	Fiber Type (nm)		
80C08C	Many at 10 Gb/s	High Sensitivity, Continuous Clock Recovery available (SONET/SDH, 10GbE, 10GFC, FEC, G.709, etc.)	750 to 1650 MM/SM		
	Other modules are available for standards from 155 Mb/s to 43 Gb/s and bandwidths up to 65 GHz.				

► Electrical Sampling (20 GHz, TDR) Module

	Bandwidth, TDR Speed	Features	Dynamic Range (V _{P-P})
80E04	20 GHz 28 ps tr (typ)	True differential TDR	1 V _{p-p}
	Other modules a	available with bandwidths from 12.5	GHz to 70 GHz.

► Complete Probe Solutions

	Complete Frobe Solutions
Passive Probes	P5050 10X, 500 MHz passive probe P6101B 1X, 15 MHz passive probe P6339A 10X, 500 MHz buffered passive probe P8018 1X, 20 GHz passive SMA probe
Low-capacitance Probes	P6150 1X/10X, 3 GHz/9 GHz low-capacitance probe P6158 20X, 3 GHz low-capacitance probe
Active Probes	P6205 10X, 750 MHz active probe P6241 10X, 4 GHz active probe P6243 10X, 1 GHz active probe P6245 10X, 1.5 GHz active probe P6249 5X, 4 GHz active probe P7225 10X, 2.5 GHz active probe P7240 5X, 4 GHz active probe P7260 5X/25X, 6 GHz active probe
Differential Probes	P6246 1X/10X, 400 MHz differential probe P6247 1X/10X, 1 GHz differential probe P6248 1X/10X, 1.5 GHz differential probe P6330 5X, 3.5 GHz differential probe P7330 5X, 3.5 GHz differential probe P7350 6.25X, 5 GHz differential probe ADA400A, 1 MHz microvolt differential probe
Current Probes	AM503S 500 A DC, 100 MHz current probe system AM5030S 500 A DC, 100 MHz current probe system CT1.7 A _{FMS} , 1 GHz current probe CT2 3.5 A _{FMS} , 200 MHz current probe CT6.35 A _{FMS} , 2 GHz current probe P6021 7 A _{FMS} , 60 MHz current probe P6022 3 A _{FMS} , 120 MHz current probe TCP202 15 A DC, 50 MHz current probe
High-voltage Probes	P5100 100X, 250 MHz, high-voltage, single-ended probe P6015A 1000X, 75 MHz, high-voltage, single-ended probe P5205 50X/500X, 100 MHz, high-voltage differential probe P5210 100X/1000X, 50 MHz high-voltage differential probe
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Notes

The following probes, when used with the TDS6000 and TDS/CSA7000/B Series*¹ oscilloscopes, require the Tektronix TCA-BNC adapter: P6249, P6241, CT1, CT2, CT6, TCP202, AM503S, AM5030S, P6158, P6248, P6330, P6243, P6245.

The following probe, when used with the TDS6000 and TDS/CSA7000/B Series oscilloscopes, requires the Tektronix TCA-SMA adapter: P6150.

The following probes, when used with the TDS6000 and TDS/CSA7000/B Series oscilloscopes, require the Tektronix TCA-1MEG adapter: P6101B, P6139A, P6021, P6022, P6015A, ADA400A, P5100, P5205, P5210.

 $^{\star 1}$ Not applicable for TDS7054 and TDS7104.



For answers to your questions, and further assistance in choosing the right Tektronix oscilloscope, probes and accessories for your needs, call your Tektronix representative now. Or visit www.tektronix.com/oscilloscopes.

► Application-specific Software Options

TDSRT-Eye	Serial Data Compliance and Analysis
TDSJIT3	Jitter and Timing Analysis
TDSDDM2	Disk Drive Analysis
TDSCPM2	ANSI/ITU Telecom Pulse Compliance Testing
TDSPWR2	Power Measurement and Analysis
TDSUSBS	USB 2.0 Compliance Testing
TDSUSBF	USB 2.0 Test Fixture
TDSDVD	Optical Storage Analysis

► Recommended Accessories

TCA-1MEG TekConnect™ high-impedance buffer amplifier	
TCA-N TekConnect-to-N adapter	
TCA-SMA TekConnect-to-SMA adapter	
TCA-BNC TekConnect-to-BNC adapter	
AMT75 1 GHz, 75 Ω electrical communication adapter	
AFTDS electrical communication differential signal adapter	
AD007 GPIB-LAN adapter	
P6701B short-wavelength (500 to 950 nm) optical-to-electrical converter	
P6703B long-wavelength (1100 to 1700 nm) optical-to-electrical converter	

For Further Information

Tektronix maintains a comprehensive, constantly expanding collection of oscilloscopes, probes and other software options.

Please visit www.tektronix.com/oscilloscopes

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