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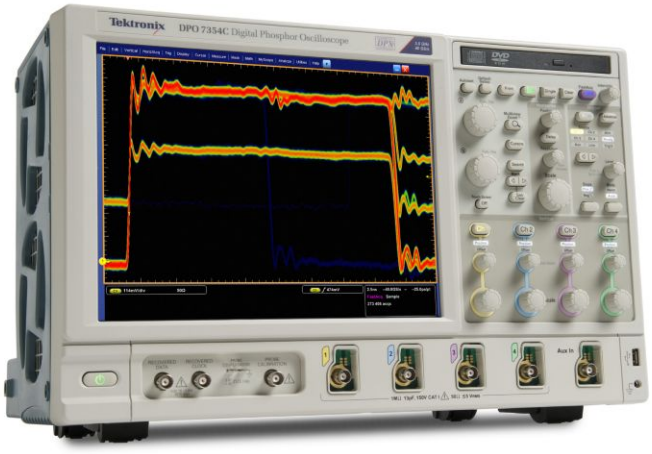
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Tektronix®

Digital Phosphor Oscilloscopes

DPO7000 Series Datasheet



Tektronix understands that engineers rely on an oscilloscope throughout their design cycle, from prototype turn-on to production testing. The DPO7000 Series oscilloscopes' unique capabilities combined with exceptional signal acquisition performance and analysis accelerate your measurement tasks.

Key performance specifications

- 3.5 GHz, 2.5 GHz, 1 GHz, and 500 MHz bandwidth models
- Up to 40 GS/s real-time sample rate on one channel, up to 20 GS/s on two channels, and up to 10 GS/s on three or four channels
- Up to 500 megapoint record length with MultiView Zoom™
- >250,000 wfms/s maximum waveform capture rate with FastAcq®
- FastFrame™ segmented memory acquisition mode with >310,000 waveforms per second capture rate
- User-selectable bandwidth limit filters for better low-frequency measurement accuracy

Key features

- Ease of use features
  - Pinpoint® Triggering provides the most flexible and highest performance triggering, with over 1400 combinations to address virtually any triggering situation
  - Visual Trigger and Search precisely qualifies triggers and finds unique events in complex waveforms
  - Advanced Search and Mark to find specific events in the entire waveform
  - MyScope® custom control windows and right mouse click menus for exceptional efficiency
  - 53 automated measurements, waveform histograms, and FFT analysis for simplified waveform analysis
  - TekVPI® Probe Interface supports active, differential, and current probes for automatic scaling and units
  - 12.1 in. (307 mm) bright XGA display with touch screen
- Optional serial triggering and analysis
  - Automated Serial Triggering, Decode, and Search Options for I^2C, SPI, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, and USB 2.0
  - Automated Serial Analysis Options for MIPI® D-PHY DSI-1 and CSI-2, 8b/10b, Ethernet, and PCI Express
  - Clock Recovery from serial data streams
  - 64-bit NRZ Serial Pattern Trigger for isolation of pattern-dependent effects up to 1.25 Gb/s
- Optional technology specific analysis
  - Software Solutions provide built-in domain expertise for MIPI® D-PHY, Ethernet, BroadR-Reach, MOST, and USB 2.0 Compliance Testing, Jitter, Timing, Eye Diagrams, Power, DDR Memory Bus Analysis, and Wideband RF
  - Limit and Mask Testing provide quick insight into signal characteristics

Connectivity

- USB Host Ports on the front and side panels for quick and easy data storage, printing, and connecting USB peripherals
- Integrated 10/100/1000BASE-T Ethernet port for network connection and Video Out port to export the oscilloscope display to a monitor or projector
- Microsoft® Windows 7 64-bit operating system for easy connectivity and integration into your environment
- LXI Class C compliant

TekScope Anywhere™ off-line analysis

TekScope Anywhere™ brings the power of the oscilloscope analysis environment to the PC. Users now have the flexibility to perform analysis tasks including timing, eye, and jitter analysis outside the lab. Waveform data and setups [1] from Tektronix MDO3000, MDO4000, MSO/DPO5000, DPO7000C, or MSO/DPO70000C/D/DX/SX Series oscilloscopes can quickly be shared among team members and remote sites, resulting in improved efficiency.

Simplified analysis for complex digital designs

With the DPO7000C Digital Phosphor Oscilloscope Series, you can analyze analog and serial bus signals with a single instrument to quickly find and diagnose problems in complex designs. Bandwidths up to 3.5 GHz and sample rates up to 40 GS/s ensure you have the performance you need to see fast-changing signal details. To capture long windows of signal activity while maintaining fine timing resolution, the DPO7000C Series offers a deep record length of up to 25 M points standard on all channels and an optional record length of up to 500 M points on one channel.

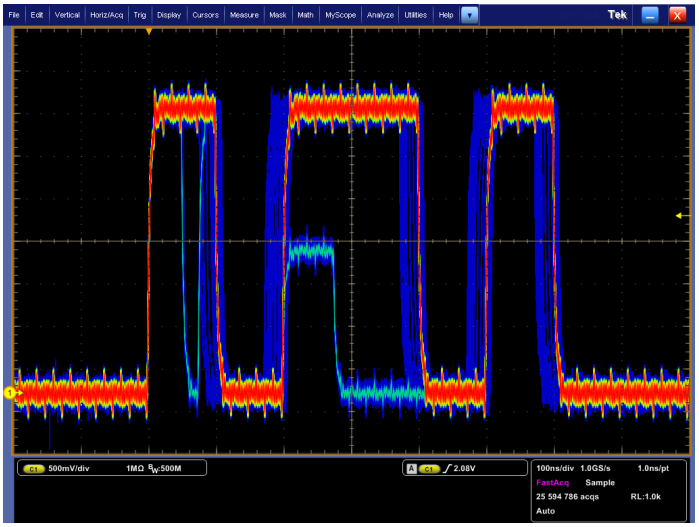
With Advanced Search and Mark and MultiView Zoom™ features for rapid waveform navigation, and more than 15 optional software and analysis packages for common technologies and in-depth analysis tasks, the DPO7000C Series from Tektronix provides the feature-rich tools you need to simplify and speed debug of your complex design.

Comprehensive features speed every stage of debug

The DPO7000C Series offers a robust set of features to speed every stage of debugging your design – from quickly discovering an anomaly and capturing it, to searching your waveform record for the event and analyzing its characteristics and your device's behavior.

Discover

To debug a design problem, first you must know it exists. Every design engineer spends time looking for problems in their design, a time-consuming and frustrating task without the right debug tools.



Discover – Fast waveform capture rate - over 250,000 wfm/s - maximizes the probability of capturing elusive glitches and other infrequent events.

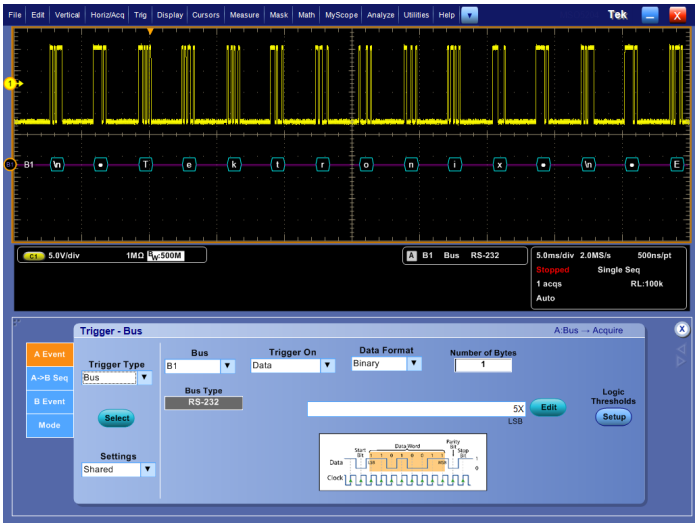
The DPO7000C Series offers the industry's most complete visualization of signals, providing fast insight into the real operation of your device. Tektronix proprietary FastAcq® technology delivers a fast waveform capture – greater than 250,000 waveforms per second – that enables you to see glitches and other infrequent transients within seconds, revealing the true nature of device faults. A digital phosphor display with color intensity grading shows the history of a signal's activity by using color to identify areas of the signal that occur more frequently, providing a visual display of just how often anomalies occur.

Capture

Discovering a device fault is only the first step. Next, you must capture the event of interest to identify root cause.

The DPO7000C Series provides a complete set of triggers – including runt, glitch, width, timeout, transition, pattern, state, setup/hold violation, window, comm, and serial pattern – to help quickly find your event. Enhanced Triggering reduces trigger jitter at the trigger point. In this mode, the trigger point can be used as a measurement reference.

1 Setups for MSO/DPO5000/B, DPO7000C, MSO/DPO70000C/D/DX/SX models only.



Capture – Triggering on a specific transmit data packet going across an RS-232 bus. A complete set of triggers, including triggers for specific serial packet content, ensures you quickly capture your event of interest.

To enable complex system debug and validation, the DPO7000C Series provides Pinpoint® triggering, using Silicon Germanium (SiGe) technology to provide trigger performance up to the bandwidth of the oscilloscope and over 1400 trigger combinations. Most other trigger systems offer multiple trigger types only on a single event (A event), with the delayed trigger (B event) selection limited to edge-type triggering, and often do not provide a way to reset the trigger sequence if the B event doesn't occur. But Pinpoint triggering provides a full suite of advanced trigger types on both A and B triggers with Reset triggering to begin the trigger sequence again after a specified time, state, or transition so that even events in the most complex signals can be captured.

Finding the right characteristic of a complex signal can require hours of collecting and sorting through thousands of acquisitions for the event of interest. Defining a trigger that isolates the desired event and shows data only when the event occurs speeds up this process. Visual Trigger and Search makes the identification of the desired waveform events quick and easy by scanning through all waveform acquisitions and comparing them to on-screen areas (geometric shapes).

With up to a 500 M point record length, you can capture many events of interest, even thousands of serial packets, in a single acquisition for further analysis while maintaining high resolution to zoom in on fine signal details. Investigate multiple segments of your waveform capture simultaneously with MultiView Zoom™ to quickly compare events in real time. FastFrame™ Segmented Memory mode enables you to make efficient use of large records by capturing many trigger events in a single record eliminating large time gaps between events of interest. View and measure the segments individually or as an overlay.

From triggering on specific packet content to automatic decode in multiple data formats, the DPO7000C Series provides integrated support for a broad range of serial buses – I^2C, SPI, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, Ethernet, USB 2.0, and MIPI D-PHY. The ability to decode up to 16 serial buses simultaneously means you gain insight into system-level problems quickly.

Search

Finding your event of interest in a long waveform record can be time consuming without the right search tools. With today's record lengths pushing beyond a million data points, locating your event can mean scrolling through thousands of screens of signal activity.

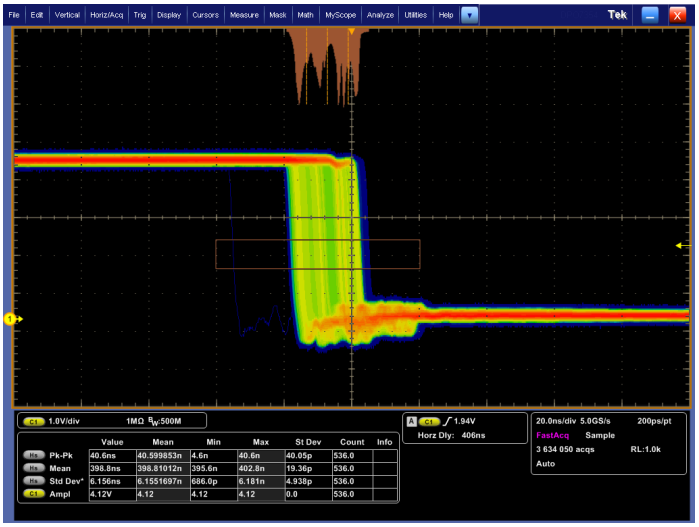


Search – Results of an advanced search for a runt pulse or a narrow glitch within a long waveform record. Each instance of the runt or glitch is automatically marked for easy reference.

The DPO7000C Series offers the industry's most comprehensive search and waveform navigation with the standard Advanced Search and Mark feature and front-panel controls. User marks allow you to mark any location that you may want to reference later for further investigation. Or, automatically search your entire record for the criteria you define. Along the way it will automatically mark every occurrence of your defined event so you can quickly move between events. The advanced search and mark capability of the DPO7000C Series can search for up to eight different events simultaneously and stop a live acquisition when it finds an event of interest, saving even more time.

Analyze

Verifying that your prototype's performance matches simulations and meets the project's design goals requires analyzing its behavior. Tasks can range from simple checks of rise times and pulse widths to sophisticated power loss analysis, characterization of system clocks, and investigation of noise sources. The DPO7000C Series offers a comprehensive set of integrated analysis tools including waveform- and screen-based cursors, 53 automated measurements, advanced waveform math including arbitrary equation editing, custom MATLAB and .NET math plug-in analysis functions, waveform histograms, and FFT analysis.



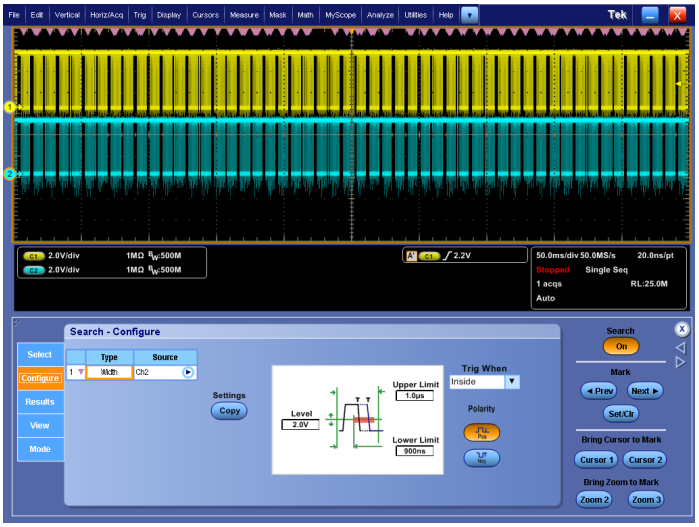
Analyze – Waveform histogram of a falling edge showing the distribution of edge position (jitter) over time. Included are numeric measurements made on the waveform histogram data. A comprehensive set of integrated analysis tools speeds verification of your design's performance.

Every DPO7000C Series oscilloscope includes the DPOJET Essentials jitter and eye pattern analysis software package, extending the oscilloscope's measurement capabilities to take measurements over contiguous clock and data cycles in a single-shot real-time acquisition. This enables measurement of key jitter and timing analysis parameters such as Time Interval Error and Phase Noise to help characterize possible system timing issues. Analysis tools such as plots for time trends and histograms quickly show how timing parameters change over time, and spectrum analysis quickly shows the precise frequency and amplitude of jitter and modulation sources.

Specialized application support for serial bus debug and compliance test, jitter and eye pattern analysis, power supply design, limit and mask testing, DDR memory bus analysis, and wideband RF is also available.

Advanced search and mark

A 25 M point standard record length represents thousands of screens of information. The DPO7000C Series enables you to find your event in seconds with Advanced Search and Mark.



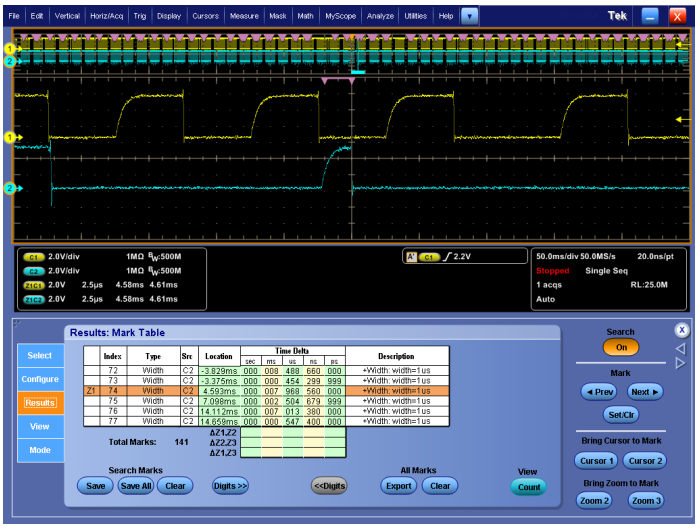
Search step 1: You define what you would like to find.

User marks

Press the Set/Clear front-panel button to place one or more marks on the waveform. Navigating between marks is as simple as pressing the Previous (←) and Next (→) buttons on the front panel.

Search marks

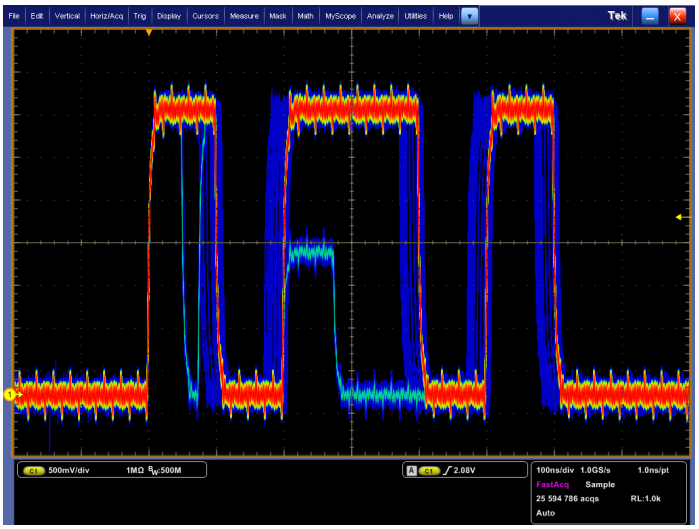
The Search button allows you to automatically search through your long acquisition looking for user-defined events. All occurrences of the event are highlighted with search marks and are easily navigated to, using the front-panel Previous (←) and Next (→) buttons. Search types include edge, glitch, width, timeout, runt, pattern, state, setup and hold, transition, and window.



Search step 2: Advanced Search and Mark automatically searches through the record and marks each event with a solid colored triangle. You can then use the Previous and Next buttons to jump from one event to the next.

Digital phosphor technology

The DPO7000C Series' digital phosphor technology provides you with fast insight into the real operation of your device. Its fast waveform capture rate – greater than 250,000 wfm/s – gives you a high probability of quickly seeing the infrequent problems common in digital systems: runt pulses, glitches, timing issues, and more.



Digital phosphor technology enables greater than 250,000 wfm/s waveform capture rate and real-time color grading on the DPO7000C Series.

Waveforms are superimposed with one another and waveform points are color coded by frequency of occurrence. This quickly highlights the events that occur more often over time or, in the case of infrequent anomalies, occur less often.

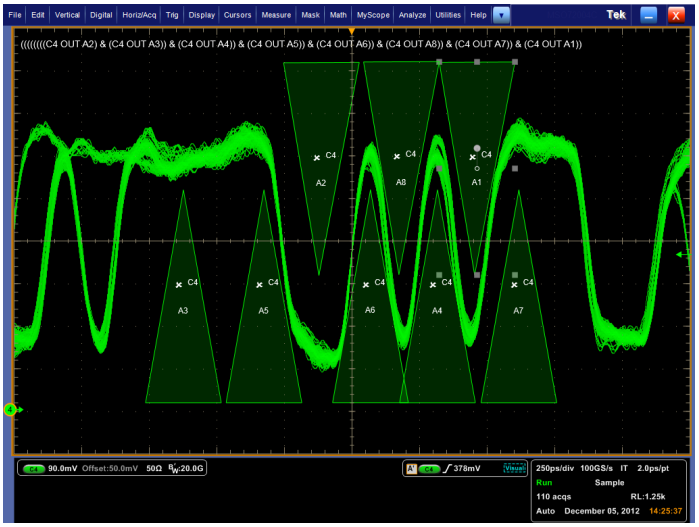
With the DPO7000C Series, you can choose infinite persistence or variable persistence, determining how long the previous waveform acquisitions stay on-screen. This allows you to determine how often an anomaly is occurring.

Visual Trigger – Find the signal of interest quickly

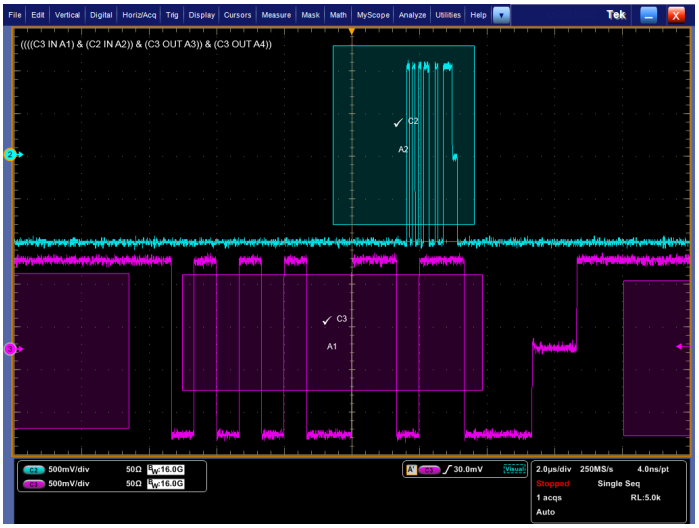
Finding the right cycle of a complex bus can require hours of collecting and sorting through thousands of acquisitions for an event of interest. Defining a trigger that isolates the desired event speeds up debug and analysis efforts.

Visual Trigger qualifies the Tektronix Pinpoint Triggers by scanning through all waveform acquisitions and comparing them to on-screen areas (geometric shapes). Up to eight areas can be created using a mouse or touchscreen, and a variety of shapes (triangles, rectangles, hexagons, or trapezoids) can be used to specify the desired trigger behavior. Once shapes are created, they can be edited interactively to create ideal trigger conditions

Visual Trigger extends the Tektronix oscilloscope's triggering capabilities for a wide variety of complex signals as illustrated by the examples shown here.



Customized serial triggering. Visual Trigger set to find a serial data pattern of 1101 0101.



Multiple channel triggering. Visual Trigger areas can be associated with events spanning multiple channels such as packets transmitted on two USB2.0 buses simultaneously.

By triggering only on the most important signal events, Visual Trigger can save hours of capturing and manually searching through acquisitions. In seconds or minutes, you can find the critical events and complete your debug and analysis efforts. Using the Mark All Trigger Events feature, once your Visual Trigger is set, your oscilloscope can automatically search the entire acquired waveform for all events with the same characteristics and mark them for you - a great time-saving feature.

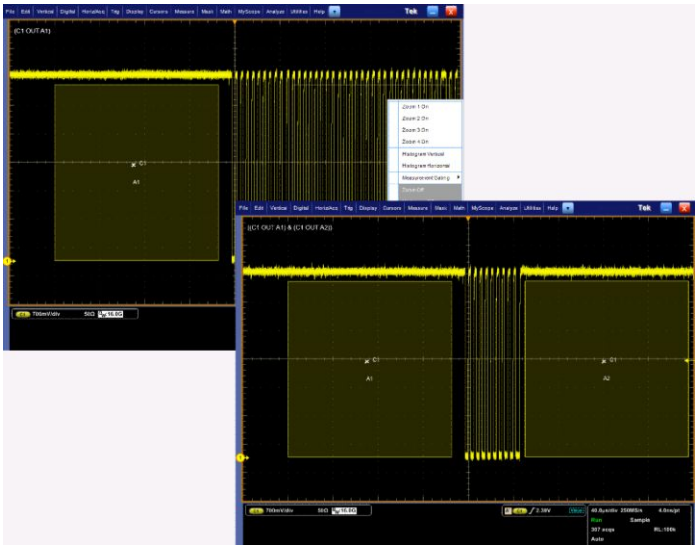
DDR memory bus events involve clocks, strobes and data channels as well as multiple amplitudes and bursts of data.



DDR memory. Visual Trigger used to isolate a rare occurrence of a write burst on a specific bit pattern in DDR3. The trigger event is a Write DQ burst of 11000000, when the DQ launch starts from a non-tri-state voltage value. DDR memory bus events involve clocks, strobes and data channels as well as multiple amplitudes and bursts of data.



Boolean logic trigger qualification. Boolean logic using logical OR allows the user to simultaneously monitor each bit and capture the occurrence of an anomaly at any point in the acquisition.



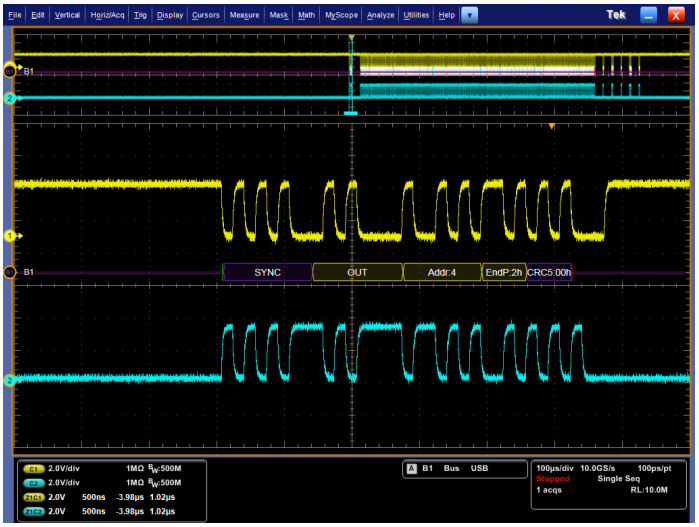
Trigger on the width of a burst of 10 pulses. By drawing a "Must be outside" area before the first clock pulse and a second "Must be outside" area after the tenth pulse, as shown, you can define a Visual Trigger setup that captures the desired burst width.

Serial triggering and analysis (optional)

On a serial bus, a single signal often includes address, control, data, and clock information. This can make isolating events of interest difficult. The DPO7000C Series offers a robust set of tools for debugging serial buses with automatic trigger and decode on I^2C, SPI, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, and USB 2.0, and decode for MIPI D-PHY DSI-1 and CSI-2, 8b/10b, Ethernet, and PCI Express serial buses.

Serial triggering

Trigger on packet content such as start of packet, specific addresses, specific data content, unique identifiers, etc. on popular serial interfaces such as I^2C, SPI, CAN, LIN, FlexRay, RS-232/422/485/UART, MIL-STD-1553, and USB 2.0.



Triggering on a specific OUT Token packet on a USB full-speed serial bus. A bus waveform provides decoded packet content including Start, Sync, PID, Address, End Point, CRC, Data values, and Stop.

Bus display

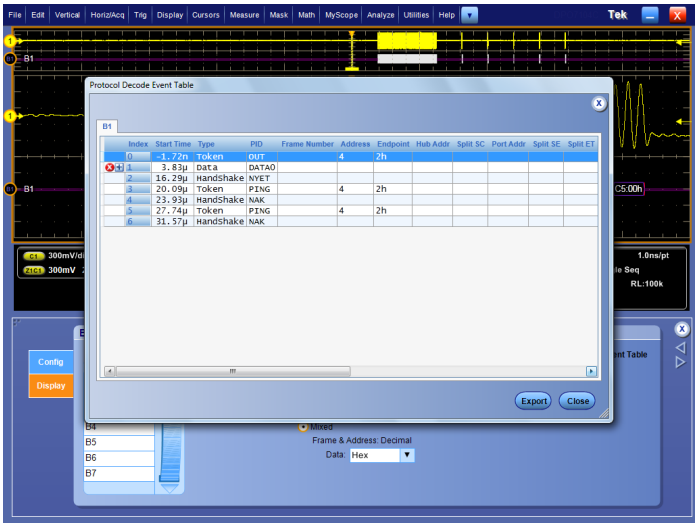
Provides a higher-level, combined view of the individual signals (clock, data, chip enable, etc.) that make up your bus, making it easy to identify where packets begin and end and identifying subpacket components such as address, data, identifier, CRC, etc.

Bus decoding

Tired of having to visually inspect the waveform to count clocks, determine if each bit is a 1 or a 0, combine bits into bytes, and determine the hex value? Let the oscilloscope do it for you! Once you've set up a bus, the DPO7000C Series will decode each packet on the bus, and display the value in hex, binary, decimal (USB only) or ASCII (USB and RS-232/422/485/UART only) in the bus waveform.

Event table display

In addition to seeing decoded packet data on the bus waveform itself, you can view all captured packets in a tabular view much like you would see in a software listing. Packets are time stamped and listed consecutively with columns for each component (Address, Data, etc.).



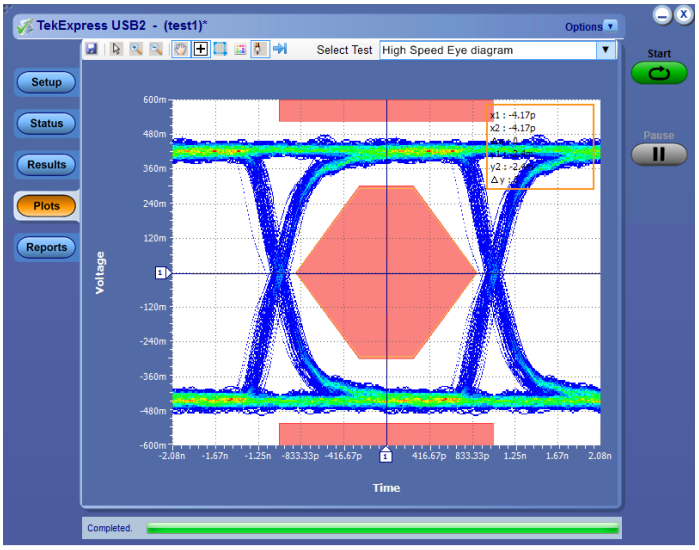
Event table showing decoded serial packet data in a long acquisition.

Bus searching

Serial triggering is very useful for isolating the event of interest, but once you've captured it and need to analyze the surrounding data, what do you do? In the past, users had to manually scroll through the waveform counting and converting bits and looking for what caused the event. With the DPO7000C Series, you can have the oscilloscope automatically search through the acquired data for user-defined criteria including serial packet content. Each occurrence is highlighted by a search mark. Rapid navigation between marks is as simple as pressing the Previous (←) and Next (→) buttons on the front panel.

Serial bus compliance test (optional)

Software packages for automated compliance test are available for BroadR-Reach/100BASE-T1 (Option BRR), MIPI D-PHY (Option D-PHY), Ethernet 10BASE-T, 10BASE-Te, 100BASE-TX, and 1000BASE-T (Option ET3), NBASE-T and IEEE802.3bz (Option NBASE-T), 10GBASE-T (Option XGBT2), MOST50 and MOST150 electrical (Option MOST), and USB 2.0 (Option USB2) physical-layer devices. These software packages enable you to conduct testing using the standard's specified compliance tests.



USB 2.0 Automated Compliance Testing.

Power analysis (optional)

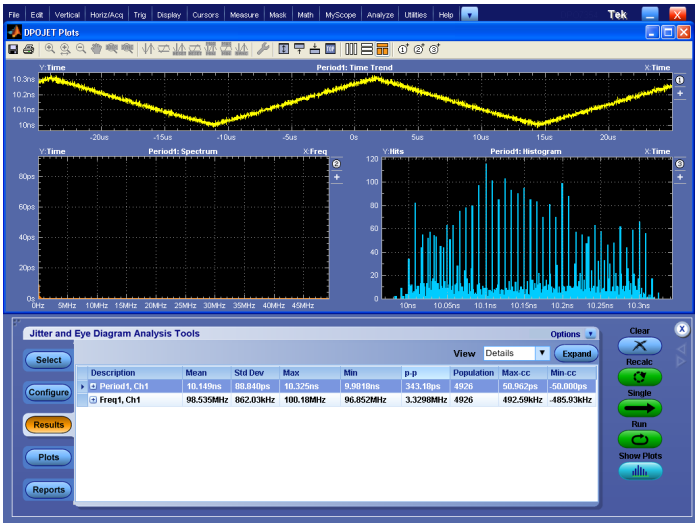
The optional power analysis software package (Option PWR) enables quick and accurate analysis of power quality, switching loss, harmonics, magnetic measurements, safe operating area (SOA), modulation, ripple, amplitude and timing measurements, and slew rate (di/dt, dv/dt). Automated, repeatable power measurements are available with a touch of a button; no external PC or complex software setup is required. The package includes a report generation tool to automatically create detailed reports to document your measurement results.



Switching Loss measurements. Automated power measurements enable quick and accurate analysis of common power parameters.

Advanced analysis jitter timing and eye diagram measurements (optional)

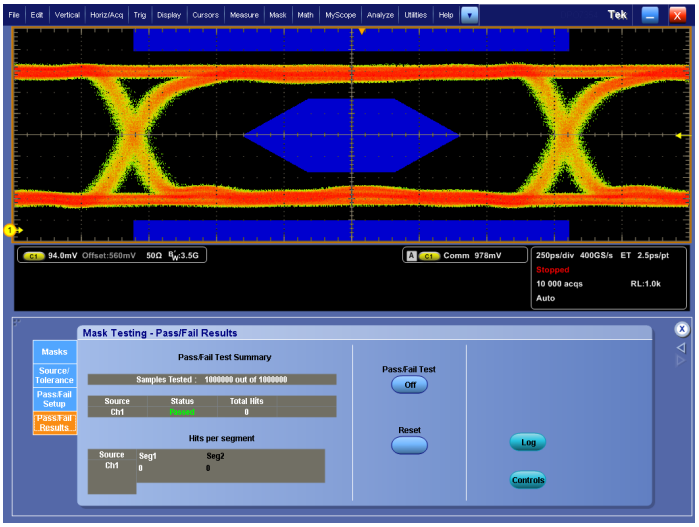
The optional DPOJET Advanced software package (Option DJA) offers extended capabilities, providing a complete suite of analysis tools for insight into jitter, timing and other signal quality issues. DPOJET Advanced adds advanced tools such as Rj/Dj separation, eye diagram masks, and Pass/Fail limits for conformance testing. The innovative one-touch wizard makes setup for jitter measurements easy. DPOJET Advanced is also a measurement framework that works with standards-specific compliance test packages for applications such as DDR memory and USB 2.0.



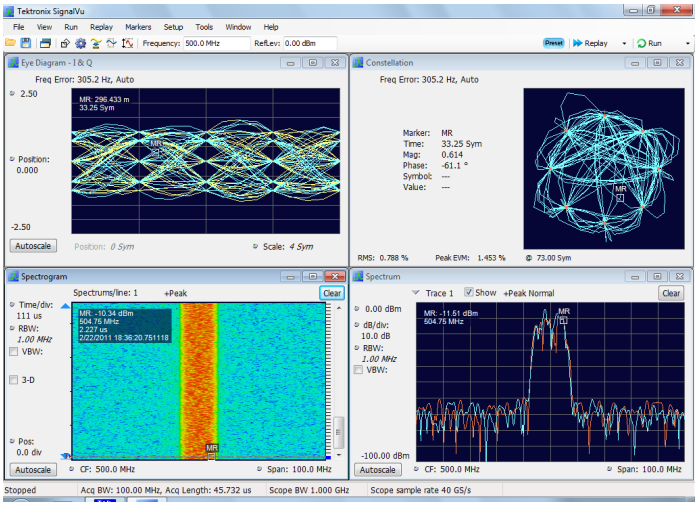
Advanced analysis, jitter, eye diagram, and timing measurements.

Limit and mask testing

The standard limit test and optional mask test (Option MTM) software packages are useful for long-term signal monitoring, characterizing signals during design, and testing on a production line. The limit test software compares a tested signal to a known good or "golden" version of the same signal with user-defined vertical and horizontal tolerances. The mask test software includes a robust set of masks for telecommunications and computer standards for easily checking compliance to a standard. Additionally, custom masks can be created and used for characterizing signals. With both software packages you can tailor a test to your specific requirements by defining test duration in number of waveforms, setting a violation threshold that must be met before considering a test a failure, counting hits along with statistical information, and setting actions upon violations, test failure, and test complete. Whether specifying a limit template or a mask, conducting pass/fail tests in search of waveform anomalies such as glitches has never been easier.



Mask testing an OC-12 signal, capturing any violations of the mask.



SignalVu™ enables detailed analysis in multiple domains.

DDR memory bus analysis (optional)

The optional DDR memory analysis software package (Option DDRA) automatically identifies DDR1, DDR2, DDR3, LP-DDR, LP-DDR2, and GDDR3 Reads and Writes and makes JEDEC conformance measurements with Pass/Fail results on all edges in every Read and Write burst, perfect for debugging and troubleshooting DDR memory buses. Also provided are common measurements of clock, address, and control signals. Used with DPOJET (Option DJA), Option DDRA is the fastest way to debug complex memory signaling issues.

Vector signal analysis (optional)

The optional SignalVu™ vector signal analysis packages (Options SVE, SVA, SVM, SVO, SVP, and SVT) easily validate wideband designs and characterize wideband spectral events. By combining the signal analysis engine of Tektronix real-time spectrum analyzers with the wide bandwidth acquisition of Tektronix digital oscilloscopes, you can now evaluate complex baseband signals directly on your oscilloscope. You get the functionality of a vector signal analyzer, a spectrum analyzer, and the powerful trigger capabilities of a digital oscilloscope – all in a single package. Whether your design validation needs include wideband radar, high data-rate satellite links, or frequency-hopping communications, SignalVu™ vector signal analysis software can speed your time-to-insight by showing you time-variant behavior of these wideband signals.

Designed to make your work easier

Large high-resolution display

The DPO7000C Series features a 12.1 in. (307 mm) XGA color display with an integrated touch screen for seeing intricate signal details.

Dedicated front-panel controls

Per-channel vertical controls provide simple and intuitive operation. No longer do you need to share one set of vertical controls across all four channels.

Connectivity

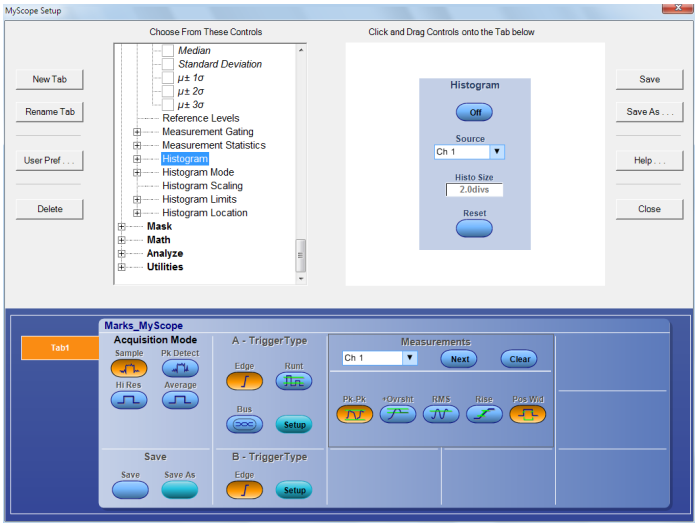
USB 2.0 host ports on the front and side panels enable easy transfer of screenshots, instrument settings, and waveform data to a USB thumb drive. The rear panel contains a GPIB port for controlling the oscilloscope remotely from a computer. An integrated 10/100/1000BASE-T Ethernet port enables easy connection to networks and a Video Out port allows the oscilloscope display to be exported to an external monitor or projector. PS-2 ports for keyboard and mouse are included for security-conscious applications that require the USB ports to be disabled. A standard removable hard disk drive makes customizing settings for different users easy and enables use in secure environments.

TekVPI® probe interface

The TekVPI probe interface sets the standard for ease of use in probing. TekVPI probes feature status indicators, controls and a probe menu button right on the probe itself. This button brings up a probe menu on the oscilloscope display with all relevant settings and controls for the probe. The TekVPI interface enables direct attachment of a current probe without requiring a separate power supply. TekVPI probes can be controlled remotely through USB, GPIB, or Ethernet, enabling more versatile solutions in ATE environments.

MyScope® custom control window

Easily create your own personalized "toolbox" of oscilloscope features in a matter of minutes using a simple, visual, drag-and-drop process. Once created, these custom control windows are easily accessed through a dedicated MyScope menu selection on the oscilloscope. This is ideal in a shared resource environment where each person can have their own custom control interface suited to their particular use. MyScope control windows benefit all oscilloscope users, eliminating the ramp-up time that many face when returning to the lab after not using an oscilloscope for a while, and enabling power users to be far more efficient.



MyScope custom control windows are created with a simple drag-and-drop process enabling each user to have a unique interface.

Floating licenses

Floating licenses offer an alternative method to manage your Tektronix asset. Floating licenses allow license-key enabled options to be easily moved among all your MSO/DPO5000, DPO7000, and DPO/DSA/MSO70000 Series of Tektronix oscilloscopes. Floating licenses are available for many license-key enabled options. To order a floating version of an option license add “DPOFL-“ prefix to the option name. (e.g. DPOFL-ET3)

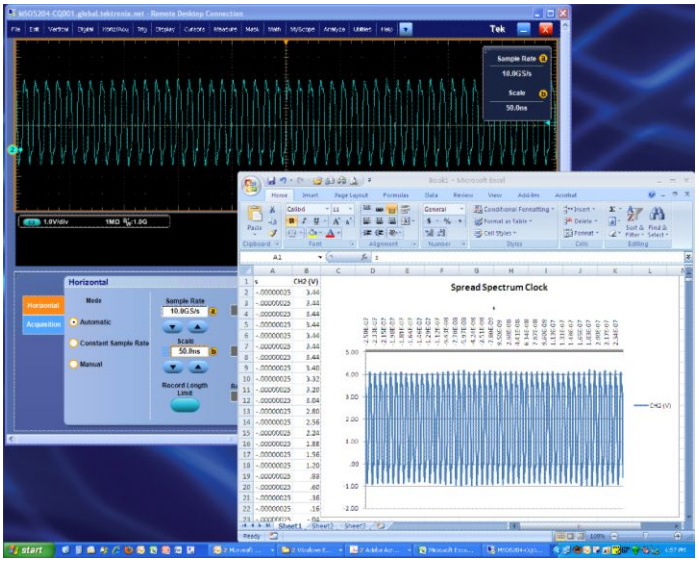
Check www.tek.com for additional information about floating license options.

Interoperability with logic analyzer

The Tektronix Integrated View (iView™) data display enables digital designers to solve signal integrity challenges and effectively debug and verify their systems more quickly and easily. This integration allows designers to view time-correlated digital and analog data in the same display windows, and isolate the analog characteristics of the digital signals that are causing system failures. No user calibration is required. And, once set up, the iView feature is completely automated.

Remote operation and extended analysis

There are many ways to connect to your DPO7000C Series oscilloscope to conduct extended analysis. The first makes use of the Windows Remote Desktop capability – connect directly to your oscilloscope and operate the user interface remotely through the built-in Remote Desktop. A second way to connect is through Tektronix OpenChoice® software which makes use of the fast embedded bus, transferring waveform data directly from acquisition to analysis applications on the Windows desktop at much faster speeds than conventional GPIB transfers. Industry-standard protocols, such as TekVISA™ interface and ActiveX controls are included for using and enhancing Windows applications for data analysis and documentation. IVI-COM instrument drivers are included to enable easy communication with the oscilloscope using GPIB, serial data, and LAN connections from programs running on the instrument or an external PC. Or, use the Software Developer's Kit (SDK) to help create custom software to automate multistep processes in waveform collection and analysis with Visual BASIC, C, C++, MATLAB, LabVIEW, LabWindows/CVI, and other common Application Development Environments (ADE). Microsoft® Excel and Word toolbars are included to simplify data capture and transfer directly to these programs running on the Windows desktop. A third way to connect to your oscilloscope is through NI LabVIEW SignalExpress Tektronix Edition, enabling you to instantly acquire, generate, analyze, compare, import, and save measurement data and signals using an intuitive drag-and-drop user interface that does not require any programming.



Capture data into Microsoft Excel using the unique Excel toolbar, and create custom reports using the Word toolbar.

Specifications

All specifications are guaranteed unless noted otherwise. All specifications apply to all models unless noted otherwise.

Model overview

		DPO7054C	DPO7104C	DPO7254C	DPO7354C
Input Channels		4			
Bandwidth		500 MHz	1 GHz	2.5 GHz	3.5 GHz
Rise Time 10% to 90% (Typical)		460 ps	300 ps	160 ps	115 ps
Rise Time 20% to 80% (Typical)		310 ps	200 ps	100 ps	95 ps
DC Gain Accuracy		±1% with offset/position set to 0			
Bandwidth Limits		Depending on instrument model: 3.0 GHz, 2.5 GHz, 2 GHz, 1 GHz, 500 MHz, 250 MHz, and 20 MHz			
Effective Number of Bits (Typical, sine wave input at instrument bandwidth, 50 mV/div, 50 Ω Input Impedance, maximum sample rate, 20k point record length)		6.8 bits	6.7 bits	5.6 bits	5.6 bits
Random Noise (RMS, typical, sample mode, full BW, maximum sample rate, 50 Ω)					
Step Gain	1 V	19.4 mV	19.72 mV	24.48 mV	26.28 mV
	500 mV	10.5 mV	10.89 mV	14.91 mV	16.46 mV
	200 mV	4.72 mV	4.69 mV	6.70 mV	7.26 mV
	100 mV	2.64 mV	2.70 mV	4.11 mV	4.49 mV
	50 mV	1.07 mV	1.10 mV	1.53 mV	1.65mV
	20 mV	0.487 mV	0.484 mV	0.678 mV	0.735 mV
	10 mV	0.273 mV	0.279 mV	0.414 mV	0.458 mV
	5 mV	0.173 mV	0.191 mV	0.285 mV	0.303 mV
	2 mV	0.112 mV	0.121 mV	0.142 mV	0.148 mV
	1 mV	0.087 mV	0.090 mV	0.098 mV	0.100 mV

	DPO7054C	DPO7104C	DPO7104C with Option 2SR	DPO7254C/DPO7354C
Maximum Sample Rate (1 ch)	20 GS/s	20 GS/s	40 GS/s	40 GS/s
Maximum Sample Rate (2 ch)	10 GS/s	10 GS/s	20 GS/s	20 GS/s
Maximum Sample Rate (3-4 ch)	5 GS/s	5 GS/s	10 GS/s	10 GS/s
Maximum Equivalent Time Sampling Rate	4 TS/s			
Maximum Record Length with Standard Configuration	125 M (1 ch), 50 M (2 ch), 25 M (3-4 ch)			
Maximum Record Length with Option 5RL	250 M (1 ch), 125 M (2 ch), 50 M (3-4 ch)			
Maximum Record Length with Option 10RL	—	—	—	500 M (1 ch) 250 M (2 ch) 125 M (3-4 ch)
Maximum Duration at Highest Real-time Sample Rate (1 ch)	1-2 ms with standard record length, up to 10 ms with optional record length			
Time Base Range	1.25 ps/div to 8 Ms/div	1.25 ps/div to 8 Ms/div	1.25 ps/div to 8.19 Ms/div	1.25 ps/div to 8.19 Ms/div
Time Resolution (in ET/IT mode)	500 fs	500 fs	250 fs	250 fs

Vertical system – Analog channels

Input impedance	1 MΩ ±1% with 13 pF ±2 pF, 50 Ω ±1%
Input coupling	AC, DC, GND
Input sensitivity	1 MΩ: 1 mV/div to 10 V/div 50 Ω: 1 mV/div to 1 V/div
Vertical resolution	8 bit (>11 bit with Hi Res)
Delay between any two channels, typical	≤100 ps (50 Ω, DC coupling and equal V/div at or above 10 mV/div)
Channel-to-Channel isolation	(Any two channels at equal Vertical Scale settings) (Typical) ≥100:1 at ≤100 MHz ≥30:1 between 100 MHz and 2.5 GHz ≥20:1 between 2.5 GHz and 3.5 GHz
Max input voltage 1 MΩ	±150 V, derate at 20 dB/decade to 9 V_{RMS} above 200 kHz
Max input voltage 50 Ω	5 V_{RMS}, with peaks ≤ ±24 V
Offset range	1 mV/div to 50 mV/div: ±1 V 50.5 mV/div to 99.5 mV/div: ±(1.5 V – 10 divisions) 100 mV/div to 500 mV/div: ±10 V 505 mV/div to 995 mV/div: ±(15 V – 10 divisions) 1 V/div to 5 V/div: ±100 V 5.05 V/div to 10 V/div: ±(150 V – 10 divisions)
Offset accuracy	1 mV/div to 9.95 mV/div: ±0.2% × (offset – position) ±0.1 div ±1.5 mV 10 mV/div to 99.5 mV/div: ±0.35% × (offset – position) ±0.1 div ±1.5 mV 100 mV/div to 1 V/div: ±0.35% × (offset – position) ±0.1 div ±15 mV 1.01 V/div to 10 V/div: ±0.25% × (offset – position) ±0.1 div ±150 mV
Position range	±5 divisions

Horizontal system

Time base delay time range	-10 divisions to 1000 s
Channel-to-channel deskew range	±75 ns
Delta time measurement accuracy	((0.06 / sample rate) + (2.5 ppm × Reading)) RMS
Trigger jitter (RMS)	1.5 ps_{RMS} with enhanced triggering OFF <100 fs_{RMS} with enhanced triggering ON

Horizontal system

Timebase stability (aperture uncertainty), typical	<1 ps_{RMS} (<2 ps_{Peak}) for record duration <10 µs (typical) <2.5 ps_{RMS} for record duration <30 ms <65 parts/trillion for record durations <10 s
Time base accuracy	±2.5 ppm + aging <1 ppm per year

Acquisition system

Acquisition modes	
Sample	Acquires and displays sampled values
Peak detect	Captures and displays narrow glitches at all real-time sampling rates. Glitch widths: 1 ns at ≤10 GS/s
Averaging	From 2 to 10,000 waveforms can be included in an average waveform
Envelope	From 1 to 2×10^9 waveforms included in min-max envelope
Hi-Res	Real-time boxcar averaging reduces random noise and increases resolution
Roll mode	Scrolls sequential waveform points across the display in a right-to-left rolling motion at sweep speeds slower than 50 ms/div. Works at sample rates up to 10 MS/s with a maximum record length of 40 MS
FastAcq®	FastAcq® optimizes the instrument for analysis of dynamic signals and capture of infrequent events, capturing >250,000 wfms/s on all 4 channels simultaneously
Waveform database	Accumulates waveform data providing a three-dimensional array of amplitude, time, and counts
FastFrame™	Acquisition memory divided into segments; maximum trigger rate >310,000 waveforms per second. Time of arrival recorded with each event. Frame finder tool helps to visually identify transients

Pinpoint® trigger system

Trigger sensitivity	
Internal DC coupled	0.7 div from DC to 50 MHz, increasing to 1.2 div at rated analog bandwidth (typical), up to 2.5 GHz. 2.5 div at 3.5 GHz
Aux input (external trigger) 1 MΩ	250 mV from DC to 50 MHz, increasing to 350 mV at 250 MHz (typical)
Trigger delay by time	3.2 ns to 3,000,000 s
Trigger delay by events	1 to 2,000,000,000 events
Main trigger modes	Auto, Normal, and Single
Enhanced triggering	Enhanced triggering corrects the difference in timing between the trigger path and the acquired data path (supports all Pinpoint trigger types on both A- and B-Events except pattern trigger); Default On (user-selectable); Not available in FastAcq mode.
Trigger sequences	Main, Delayed by Time, Delayed by Events, Reset by Time, Reset by State, Reset by Transition, B Event Scan. All sequences can include separate horizontal delay after the trigger event to position the acquisition window in time.
Communications-related triggers	Support for AMI, HDB3, BnZS, CMI, MLT3, and NRZ encoded communications signals. Select among isolated positive or negative one, zero pulse form, or eye patterns as applicable to the standard. Requires Option MTM .
Video trigger formats and field rates	Triggers from negative sync composite video, field 1 or field 2 for interlaced systems, any field, specific line, or any line for interlaced or noninterlaced systems. Supported systems include NTSC, PAL, SECAM, and HDTV 1080/24sF, 1080p/25, 1080i/50, 1080i/60, 1080p/24, 720p/60, 480p/60
Serial pattern trigger	
NRZ-Encoded Data	DPO7254C and DPO7354C only, requires Opt. ST1G. Up to 64 bit serial word recognizer, bits specified in binary (high, low, don't care) or hex format. Trigger on NRZ-encoded data up to 1.25 GBaud.

Pinpoint® trigger system

Clock recovery system	(DPO7254C and DPO7354C only, requires Opt. ST1G or MTM)
Clock recovery phase locked loop bandwidth	Fixed at FBaud/500
Clock recovery frequency range	1.5 MBaud to 1.25 GBaud
Clock recovery jitter (RMS)	20 ps_{RMS} + 1.25% Unit Interval RMS for PRBS data patterns
	20 ps_{RMS} + 1.25% Unit Interval RMS for repeating "0011" data pattern
Clock recovery tracking/ acquisition range	±5% of requested baud rate (typical)
Minimum signal amplitude needed for clock recovery	1 div_{p-p} up to 1.25 Gbaud
Trigger level range	
Any channel	±12 divisions from center of screen
Auxiliary input	TekVPI interface; ±5 V (50 Ω); 150 V, derate at 20 dB/decade to 9 V_{RMS} above 200 kHz (1 MΩ)
Line	Fixed at 0 V
Trigger coupling	DC
	AC (attenuates <60 Hz)
	HF Rej (attenuates >30 kHz)
	LF Rej (attenuates <80 kHz)
	Noise Reject (reduces sensitivity)
Trigger holdoff range	250 ns min to 100 s
Trigger types	A Event and Delayed B Event trigger types: edge, glitch, width, runt, timeout, transition time, logic pattern, logic state, setup/hold, window - all except Edge, Pattern, and State can be Logic State qualified by up to two channels.
Edge	Positive, negative, or either slope on any channel or front-panel auxiliary input. Coupling includes DC, AC, noise reject, HF reject, and LF reject.
Glitch	Trigger on or reject glitches of positive, negative, or either polarity. Minimum glitch width is 170 ps (typical) with rearm time of 250 ps (for DPO7254C or DPO7354C).
Width	Trigger on width of positive or negative pulse either within or outside selectable limits (225 ps to 10 s).
Runt	Trigger on a pulse that crosses one threshold but fails to cross a second threshold before crossing the first again. Event can be time- or logic-qualified.
Window	Trigger on an event that enters or exits a window defined by two user-adjustable thresholds. Event can be time or logic qualified.
Timeout	Trigger on an event which remains high, low, or either, for a specified time period (300 ps to 1 s).
Transition	Trigger on pulse edge rates that are faster or slower than specified. Slope may be positive, negative, or either.
Setup/Hold	Trigger on violations of both setup time and hold time between clock and data present on any two input channels.
Logic Pattern	Trigger when pattern goes false or stays true for specified period of time (300 ps to 1 s). Pattern (AND, OR, NAND, NOR) specified for all analog input channels defined as high, low, or don't care.
Logic State	Any logical pattern of channels (1, 2, 3) clocked by edge on channel 4. Trigger on rising or falling clock edge.
Parallel Bus	Trigger on specified data value on defined parallel bus.
Video	Trigger on all lines, specific line number, odd, even, or all fields on NTSC, PAL, SECAM, and HDTV 480p/60, 576p/50, 875i/60, 720p/30, 720p/50, 720p/60, 1080/24sF, 1080i/50, 1080p/25, 1080i/60, 1080p/24, 1080p/25, 1080p/50, 1080p/60, Bi-level, Tri-level.
Visual Trigger	Trigger on up to 8 user-specified areas, including rectangle, triangle, trapezoid, hexagon, and user-specified shapes on any of the analog channels.

Pinpoint® trigger system

Optional trigger types

Serial Pattern	Captures serial data stream with built-in clock recovery for NRZ standards up to 1.25 Gb/s. Extended with pattern lock triggering to capture repeated acquisitions of long serial data patterns. Provided as part of Opt. ST1G.
Comm	Support for AMI, HDB3, BnZS, CMI, MLT3, and NRZ encoded signals. Provided as part of Option MTM.
I^2C	Trigger on Start, Repeated Start, Stop, Missing ACK, Address (7 or 10 bit), Data (1-5 bytes), or Address and Data on I^2C buses up to 10 Mb/s. Provided as part of Opt. SR-EMBD.
SPI	Trigger on Slave Select, Idle Time, or Data (1-6 words) on SPI buses up to 10 Mb/s. Provided as part of Opt. SR-EMBD.
CAN	Trigger on Start of Frame, Frame Type (Data, Remote, Error, or Overload), Identifier, Data, Identifier and Data, End of Frame, Missing Ack, Bit Stuff Error or CRC Error on CAN buses up to 1 Mb/s. Provided as part of Opt. SR-AUTO.
LIN	Trigger on Sync, Identifier, Data, Ident and Data, Wakeup Frame, Sleep Frame, and Error on LIN buses up to 1 Mb/s. Provided as part of Opt. SR-AUTO.
FlexRay	Trigger on Indicator Bits (Normal, Payload, Null, Sync, Startup), Cycle Count, Header Fields (Indicator Bits, Identifier, Payload Length, Header CRC, and Cycle Count), Identifier, Data, Identifier and Data, End Of Frame, and Error on FlexRay buses up to 10 Mb/s. Provided as part of Opt. SR-AUTO.
MIL-STD-1553B	Trigger on Sync, Command Word, Status Word, Data Word, Idle Time, and Error on MIL-STD-1553 buses up to 1 Mb/s. Provided as part of Opt. SR-AERO.
RS-232/422/485/UART	Trigger on Start Bit, End of Packet, Data (1-5 words), and Parity Error on RS-232 buses up to 10 Mb/s. Provided as part of Opt. SR-COMP.
USB 2.0 Low speed	Trigger on Sync, Reset, Suspend, Resume, End of Packet, Token (Address) Packet, Data Packet, Handshake Packet, Special Packet, Error. Provided as part of Opt. SR-USB. Token Packet Trigger – Any token type, SOF, OUT, IN, SETUP; Address can be specified for Any, OUT, IN, and SETUP token types. Address can be further specified to trigger on ≤, <, =, >, ≥, != a particular value, or inside or outside a range. Frame number can be specified for SOF token using Binary, Hex, Unsigned Decimal, and Don't Care digits. Data Packet Trigger – Any data type, DATA0, DATA1; Data can be further specified to trigger on ≤, <, =, >, ≥, != a particular data value, or inside or outside of a range. Handshake Packet Trigger – Any handshake type, ACK, NAK, STALL. Special Packet Trigger – Any special type, Reserved. Error Trigger – PID Check, CRC5 or CRC16, Bit Stuffing.
USB 2.0 Full speed	Trigger on Sync, Reset, Suspend, Resume, End of Packet, Token (Address) Packet, Data Packet, Handshake Packet, Special Packet, Error. Provided as part of Opt. SR-USB. Token Packet Trigger – Any token type, SOF, OUT, IN, SETUP; Address can be specified for Any, OUT, IN, and SETUP token types. Address can be further specified to trigger on ≤, <, =, >, ≥, != a particular value, or inside or outside a range. Frame number can be specified for SOF token using Binary, Hex, Unsigned Decimal, and Don't Care digits. Data Packet Trigger – Any data type, DATA0, DATA1; Data can be further specified to trigger on ≤, <, =, >, ≥, != a particular data value, or inside or outside a range. Handshake Packet Trigger – Any handshake type, ACK, NAK, STALL. Special Packet Trigger – Any special type, PRE, Reserved. Error Trigger – PID Check, CRC5 or CRC16, Bit Stuffing.
USB 2.0 High speed	No protocol-level triggering. Provided as part of Opt. SR-USB. USB 2.0 High speed decoding and search only available on ≥1 GHz models.

Waveform analysis

Search and Mark Events	Use Advanced Search and Mark to automatically mark events and document waveforms. Search positive/negative slopes or both, glitches, runts, pulse widths, transition rate, setup and hold, timeout, windows, or find any logic or state pattern, up to 8 different event types on any of the 4 analog channels. Search DDR Read or Write bursts with Opt. DDRA. When an event of interest is found with a hardware trigger, other similar events can be found using "Mark All Trigger Events in Record" in the Pinpoint trigger control windows. The Event table summarizes all found events. All events are time stamped in reference to trigger position. You can choose to stop acquisitions when an event is found.

Waveform measurements	
Cursors	Waveform and Screen
Automatic measurements	53, of which 8 can be displayed on-screen at any one time
Measurement Statistics	Mean, Minimum, Maximum, Standard Deviation
Reference Levels	User-definable reference levels for automatic measurements can be specified in either percent or units
Gating	Isolate the specific occurrence within an acquisition to take measurements on, using either screen or waveform cursors
Amplitude related	Amplitude, High, Low, Maximum, Minimum, Peak-to-Peak, Mean, Cycle Mean, RMS, Cycle RMS, Positive Overshoot, Negative Overshoot
Time related	Rise Time, Fall Time, Positive Width, Negative Width, Positive Duty Cycle, Negative Duty Cycle, Period, Frequency, Delay
Combination	Area, Cycle Area, Phase, Burst Width
Histogram related	Waveform Count, Hits in Box, Peak Hits, Median, Maximum, Minimum, Peak-to-Peak, Mean (μ), Standard Deviation (sigma), μ +1sigma, μ+2sigma, μ+3sigma
Eye-pattern related	Extinction Ratio (absolute, %, dB), Eye Height, Eye Width, Eye Top, Eye Base, Crossing %, Jitter (p-p, RMS, 6sigma), Noise (p-p, RMS), Signal/Noise Ratio, Cycle Distortion, Q-Factor
Waveform Histograms	A waveform histogram provides an array of data values representing the total number of hits inside a user-defined region of the display. A waveform histogram is both a visual graph of the hit distribution and a numeric array of values that can be measured. Sources – Channel 1, Channel 2, Channel 3, Channel 4, Ref 1, Ref 2, Ref 3, Ref 4, Math 1, Math 2, Math 3, Math 4 Types – Vertical, Horizontal

Waveform processing/math	
Number of Math Waveforms	Up to 4
Arithmetic	Add, Subtract, Multiply, Divide Waveforms and Scalars
Algebraic expressions	Define extensive algebraic expressions including waveforms, scalars, user-adjustable variables, and results of parametric measurements. Perform math on math using complex equations. e.g. (Integral (CH1 – Mean(CH1)) × 1.414 × VAR1)
Math functions	Average, Invert, Integrate, Differentiate, Square Root, Exponential, Log 10, Log e, Abs, Ceiling, Floor, Min, Max, Sin, Cos, Tan, ASin, ACos, ATan, Sinh, Cosh, Tanh
Relational	Boolean result of comparison >, <, ≥, ≤, ==, !=
Frequency domain functions	Spectral Magnitude and Phase, Real and Imaginary Spectra
FFT vertical units	Magnitude: Linear, dB, dBm Phase: Degrees, radians, group delay
FFT window functions	Rectangular, Hamming, Hanning, Kaiser-Bessel, Blackman-Harris, Gaussian, Flattop2, Tek Exponential
Waveform definition	As an arbitrary math expression
Filtering function	User-definable filters. Users specify a file containing the coefficients of the filter. Several example filter files are provided
Customized Functions using Math Plug-in Interface	An interface is provided to allow users to create their own custom math functions in MATLAB or Visual Studio
Mask function	Generates a Waveform Database pixel map from a sample waveform. Sample count can be defined

Software

IVI Driver	Provides a standard instrument programming interface for common applications such as LabVIEW, LabWindows/CVI, Microsoft .NET and MATLAB. IVI-COM standard
LXI Class C Web Interface	Connect to the DPO7000C Series through a standard web browser by simply entering the oscilloscope's IP address in the address bar of the browser. The web interface enables viewing of instrument status and configuration, and status and modification of network settings. All web interaction conforms to LXI Class C specification

Display system

Display type	307.3 mm (12.1 in.) liquid-crystal active-matrix color display
Display resolution	1024 horizontal × 768 vertical pixels (XGA)
Waveform styles	Vectors, Dots, Variable Persistence, Infinite Persistence
Color palettes	Normal, Green, Gray, Temperature, Spectral, and User-defined
Format	YT, XY
Horizontal divisions	10
Vertical divisions	10

Computer system and peripherals

Operating system	Windows 7 Ultimate 64-bit Instrument operation verified with version 1.1 of the National Institute of Standards and Technology (NIST) DSS Baseline Requirements, also known as the United States Government Configuration Baseline (USGCB)
CPU	Intel i7-2600 processor, quad core, 3.4 GHz
System memory	≥8 GB
Hard disk drive	Removable hard disk drive, ≥500 GB capacity (3.5 in. SATA)
CD/DVD drive	Front-panel CD-R/W, DVD-R drive
Mouse	Optical wheel mouse, USB interface
Keyboard	Order 119-7083-xx for small keyboard; USB interface and hub

Input/Output ports

USB 2.0 High-speed Host Ports	Supports USB mass storage devices, printers, keyboard, and mouse. Ports on front and side panels of the instrument. Can be disabled
USB 3.0 SuperSpeed Host Ports	Supports USB mass storage devices, printers, keyboard, and mouse. Ports on side panel of the instrument. Can be disabled
GPIB interface	Rear panel. IEEE 488.2 standard
LAN port	RJ-45 connector, supports 10BASE-T, 100BASE-T, and 1000BASE-T
Video out port	DVI-I and VGA connectors, connect to show the oscilloscope display on an external monitor or projector. Support for extended desktop and clone mode
Audio input/output	Miniature phone jacks for stereo microphone input and stereo line output
Keyboard port	PS/2 compatible
Mouse port	PS/2 compatible
Auxiliary input	Front panel. See trigger specifications
Auxiliary Out (Software switchable)	Trigger Out: A TTL compatible pulse when the oscilloscope triggers Time Base Reference Out: A TTL compatible output of internal 10 MHz reference oscillator
External time base reference in	Time base system can phase lock to an external 10 MHz reference (10 MHz ±1%)
Analog Signal Output	BNC connector provides a buffered version of the Ch3 signal. 50 mV/div ±20% into a 1 MΩ load, 25 mV/div ±20% into a 50 Ω load. Bandwidth is 100 MHz into a 50 Ω load
Probe compensator output	Front-panel pins Amplitude: 1 V ±20% into a ≥50 Ω load Frequency: 1 kHz ±5%
Recovered Clock (DPO7254C and DPO7354C only)	(Enabled by Opt. MTM.) BNC connector, ≤1.25 Gb/s, output swing ≥130 mV_{p-p} into 50 Ω
Recovered Data (DPO7254C and DPO7354C only)	(Enabled by Opt. MTM.) BNC connector, ≤1.25 Gb/s, output swing 200 mV into 50 Ω
LXI web interface (LAN eXtensions for instrumentation)	Class: LXI Class C Version: 1.3

Power source

Power Source

100 to 240 V ±10%, 47 to 63 Hz, <550 W

115 V_{RMS} ±10%, 360 to 440 Hz, <500 VA

Physical characteristics

Dimensions

	mm	in.
Height	292	11.48
Width	451	17.75
Depth	265	10.44

Rackmount dimensions

	mm	in.
Height	331	12.25
Width	479	18.85
Depth (from rack mounting ear to back of instrument)	231.75	9.12

Weight

	kg	lb.
Net	15	32
Shipping	28.9	63.75

Rackmount weight

	kg	lb.
Net	17.4	37.5
Kit	2.5	5.5

Cooling – Required clearance

	mm	in.
Top	0	0
Bottom	0	0
Left Side	76	3
Right Side	0	0
Front	0	0
Rear	0	0

Environmental

Temperature

Operating +5 °C to +45 °C, with noncondensing conditions

Nonoperating –40 °C to +71 °C, with 15 °C/hour maximum gradient, without CD/DVD media installed in disk drive

Humidity

Operating 8% to 80% relative humidity (RH) with a maximum wet bulb temperature of 29 °C at or below +45 °C, noncondensing. Upper limit derated to 30% RH at +45 °C

Nonoperating 5% to 90% relative humidity (RH) with a maximum wet bulb temperature of 29 °C at or below +60 °C, noncondensing. Upper limit derated to 20% RH at +60 °C

Altitude

Operating 3,000 m (9,843 ft.)

Nonoperating 12,192 m (40,000 ft.)

Environmental

Regulatory

Electromagnetic compatibility	2004/108/EC
Certifications	UL61010-1; CSA61010-1, EN61010-1; IEC 61010-1

United States Government Configuration Baseline (USGCB) Testing	Tektronix has tested the DPO7000 Series oscilloscopes for compatibility with the security configuration for Information Technology products specified in the USGCB settings for Windows 7 and Internet Explorer

Ordering information

DPO7000C models

DPO7054C	500 MHz, 5/10/20 GS/s (4/2/1 ch), 25 M record length, 4-channel digital phosphor oscilloscope
DPO7104C	1 GHz, 5/10/20 GS/s (4/2/1 ch), 25 M record length, 4-channel digital phosphor oscilloscope
DPO7254C	2.5 GHz, 10/20/40 GS/s (4/2/1 ch), 25 M record length, 4-channel digital phosphor oscilloscope
DPO7354C	3.5 GHz, 10/20/40 GS/s (4/2/1 ch), 25 M record length, 4-channel digital phosphor oscilloscope

Standard accessories

P6139B	One passive voltage probe per analog channel (500 MHz, 10X, 8 pF)
—	Front cover
071-298x-xx	User Manual (please specify language when ordering)
—	GPIB programmer's reference PDF file
—	Performance verification procedure PDF file
—	Advanced Search and Mark, DPOJET Essentials, Visual Trigger and Search, and Limit Test all included standard
—	Accessory pouch
—	Mouse
—	Calibration Certificate documenting measurement traceability to National Metrology Institute(s), Z 540-1 Compliance and ISO9001
—	Power Cord (please specify power plug option when ordering)
—	One-year warranty

Instrument options

Record length options

Opt. 5RL	250 M max, 50 M/ch
Opt. 10RL	DPO7254C and DPO7354C only, 500 M max, 125 M/ch

Sample rate options

Opt. 2SR	Double maximum real-time sample rate to 40/20/10 GS/s on 1/2/4 ch (DPO7104C only)

Storage options

Opt. SSD	Solid State Hard Disk Drive, ≥300 GB

Advanced analysis options

Option	Description
Opt. BRR	BroadR-Reach/100BASE-T1 Compliance Testing (Requires TF-GBE-BTP and TF-BRR-CFD Test Fixtures) (For models of bandwidth ≥1 GHz only)
Opt. DDRA	DDR Memory Bus Analysis (Requires Opt. DJA) (For models of bandwidth ≥1 GHz only)
Opt. DJA	Jitter and Eye Analysis Tools – Advanced (DPOJET)
Opt. DJAN	DPOJET Noise, jitter, and eye analysis tools (Requires Opt. DJA)
Opt. D-PHY	MIPI® D-PHY Essentials – Transmitter Debug,Characterization, and Compliance Test Solution (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only)
Opt. ET3	Ethernet Compliance Test Software (Requires TF-GBE-BTP or TF-GBE-ATP Ethernet Test Fixture)
Opt. HSIC	USB HSIC protocol decode and electrical validation (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only.)
Opt. MOST	Electrical Compliance and Debug Test Solution for MOST50 and MOST150 (Requires Opt. DJA)
Opt. MTM	Mask Testing for ITU-T, ANSI T1.102, Ethernet, SONET/SDH, Fibre Channel, USB 2.0, IEEE 1394b, Rapid I/O, OIF, CPRI, and Serial Video; (includes hardware clock recovery on DPO7254C/DPO7354C)
Opt. NBASE-T	TekExpress Automated NBASE-T and IEEE802.3bz (2.5G and 5G) Compliance Test Software (Requires TF-XGbt Test Fixture) (For models of bandwidth ≥2.5 GHz only)
Opt. PWR	Power Measurement and Analysis Software
Opt. SR-AERO	Aerospace Serial Triggering and Analysis (MIL-STD-1553). Enables triggering on packet-level information on MIL-STD-1553 buses as well as analytical tools such as bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-AUTO	Automotive Serial Triggering and Analysis (CAN/LIN/FlexRay). Enables triggering on packet-level information on CAN, LIN, and FlexRay buses as well as analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-COMP	Computer Serial Triggering and Analysis (RS-232/422/485/UART). Enables triggering on packet-level information on RS-232/422/485/UART buses as well as analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-DPHY	MIPI® D-PHY Serial Analysis. Enables analysis of MIPI DSI-1 and CSI-2 buses with analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-EMBD	Embedded Serial Triggering and Analysis (I^2C, SPI). Enables triggering on packet-level information on I^2C and 2-wire and 3-wire SPI buses as well as analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-ENET	Ethernet Serial Analysis (10BASE-T, 100BASE-TX). Enables analysis of Ethernet buses as well as analytical tools such as bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. SR-PCIE	PCI Express Serial Analysis. Enables analysis of PCI Express buses with analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information (For models of bandwidth ≥1 GHz only) (Due to large volumes of data, use of standard high-capacity hard drive rather than the smaller SSD is recommended.)
Opt. SR-USB	USB 2.0 Serial Triggering and Analysis (LS, FS, HS). Enables triggering on packet-level content for low-speed and full-speed USB serial buses. Also enables analytical tools such as bus views, packet decoding, search tools, and packet decode tables with time stamp information for low-speed, full-speed, and high-speed USB serial buses. USB High Speed supported only on ≥1 GHz models
Opt. SR-810B	8b/10b Serial Analysis. Enables analysis of 8b/10b buses with analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information
Opt. ST1G	64-bit NRZ Serial Trigger and 8b/10b Serial Protocol Decode (includes Opt. SR-810B) (For models of bandwidth ≥2.5 GHz only)
Opt. SVA	AM/FM/PM Audio Signal Analysis (Requires Opt. SVE)
Opt. SVE	SignalVu® Essentials – Vector Signal Analysis Software
Opt. SVM	SignalVu® General Purpose Modulation Analysis (Requires Opt. SVE)
Opt. SVO	SignalVu® Flexible OFDM Analysis (Requires Opt. SVE)
Opt. SVP	SignalVu® Advanced Signal Analysis (including pulse measurements) (Requires Opt. SVE)

Option	Description
Opt. SVT	SignalVu® Frequency and Phase Settling Time Measurements (Requires Opt. SVE)
Opt. SV23	WLAN 802.11a/b/g measurement application (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
Opt. SV24	WLAN 802.11n measurement application (Requires Opt. SVE and SV23) (For models of bandwidth ≥2.5 GHz only)
Opt. SV26	SignalVu® APCO P25 measurements (Requires Opt. SVE)
Opt. SV27	SignalVu® Bluetooth Basic LE TX SIG measurements (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
Opt. SV28	SignalVu® LTE Downlink RF measurements (Requires Opt. SVE) (For models of bandwidth ≥1 GHz only)
Opt. USB2	USB 2.0 Automated Compliance Test Application (Requires TDSUSBF (USB Test Fixture). ≥2 GHz bandwidth required for high-speed USB)
Opt. USBPWR	Automated compliance test solution for USB power adapters
Opt. XGBT2	TekExpress Automated 10GBASE-T Compliance Test Software (Requires TF-XGbt Test Fixture) (For DPO7354C model only)

TekExpress application framework options

Option	Description
TEKEXP	TekExpress® Automation Framework
Opt. D-PHYTX	D-PHY Automated Solution (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only)
Opt. HEAC	HEAC Automated Solution (Requires Opt. DJA, 2RL, MTM, ST1G) (For models of bandwidth ≥2.5 GHz only)

Bundle Options

These bundled items must be purchased at the same time as the instrument purchase.

Option	Description
Opt. PS2	Power Solution Bundle: DPOPWR, THDP0200, TCP0030A, 067-1686-xx (Deskew Fixture)
Opt. PS3	Power Solution Bundle: DPOPWR, TMDP0200, TCP0020, 067-1686-xx (Deskew Fixture)

Floating license options

Floating licenses offer an alternative method to manage your Tektronix asset. Floating licenses allow license-key enabled options to be easily moved among all your MSO/DPO5000, DPO7000, and DPO/DSA/MSO70000 Series of Tektronix oscilloscopes. Floating licenses are available for the following license-key enabled options.

Check http://www.tek.com/products/oscilloscopes/floatinglicenses for additional information about floating license options.

Option	Description
DPOFL-BRR	BroadR-Reach/100BASE-T1 Compliance Testing (Requires TF-GBE-BTP and TF-BRR-CFD Test Fixtures) (For models of bandwidth ≥1 GHz only)
DPOFL-DDRA	DDR Memory Bus Analysis (Requires Opt. DJA) (For models of bandwidth ≥1 GHz only)
DPOFL-DJA	Jitter and Eye Analysis Tools – Advanced (DPOJET)
DPOFL-DJAN	DPOJET Noise, jitter, and eye analysis tools (Requires Opt. DJA)
DPOFL-D-PHY	MIPI® D-PHY Transmitter Debug, Characterization and Compliance Test Solution (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only)
DPOFL-ET3	Ethernet Compliance Testing (Requires TF-GBE-BTP or TF-GBE-ATP Ethernet Test Fixture)
DPOFL-HSIC	USB HSIC protocol decode and electrical validation (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only.)
DPOFL-MOST	Electrical Compliance and Debug Test Solution for MOST50 and MOST150 (Requires Opt. DJA)
DPOFL-MTM	Mask Testing for ITU-T, ANSI T1.102, Ethernet, SONET/SDH, Fibre Channel, USB 2.0, IEEE 1394b, Rapid I/O, OIF, CPRI, and Serial Video; (includes hardware clock recovery on DPO7254C/DPO7354C)
DPOFL-NBASE-T	TekExpress Automated NBASE-T and IEEE802.3bz (2.5G and 5G) Compliance Test Software (Requires TF-XGbt Test Fixture) (For models of bandwidth ≥2.5 GHz only)
DPOFL-PWR	Power Measurement and Analysis
DPOFL-SR-AERO	Aerospace Serial Triggering and Analysis (MIL-STD-1553). Enables triggering on packet-level information on MIL-STD-1553 buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding

Option	Description
DPOFL-SR-AUTO	Automotive Serial Triggering and Analysis (CAN/LIN/FlexRay). Enables triggering on packet-level information on CAN, LIN, and FlexRay buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL-SR-COMP	Computer Serial Triggering and Analysis (RS-232/422/485/UART). Enables triggering on packet-level information on RS-232/422/485/UART buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL-SR-DPHY	MIPI® D-PHY Serial Analysis. Enables analysis of MIPI DSI-1 and CSI-2 buses with analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL-SR-EMBD	Embedded Serial Triggering and Analysis (I^2C, SPI). Enables triggering on packet-level information on I^2C and SPI buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL-SR-ENET	Ethernet Serial Analysis (10BASE-T and 100BASE-TX) Ethernet Serial Analysis. Enables analysis of Ethernet buses with analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL-SR-PCIE	PCI Express Serial Analysis. Enables analysis of PCI Express buses with analytical tools such as digital views of the signal, bus views, and packet decoding (For models of bandwidth ≥1 GHz only) (Due to large volumes of data, use of standard high-capacity hard drive rather than the smaller SSD is recommended)
DPOFL-SR-USB	USB 2.0 Serial Triggering and Analysis (LS, FS, HS). Enables triggering on packet-level content for low-speed and full-speed USB serial buses. Also enables analytical tools such as digital views of the signal, bus views, and packet decoding for low-speed, full-speed, and high-speed USB serial buses. USB High Speed supported only on ≥1 GHz models
DPOFL-SR-810B	8b/10b Serial Analysis. Enables analysis of 8b/10b buses with analytical tools such as digital views of the signal, bus views, and packet decoding
DPOFL- ST1G	64-bit NRZ Serial Trigger and 8b/10b Serial Protocol Decode (includes Opt. SR-810B) (For models of bandwidth ≥2.5 GHz only)
DPOFL-SVA	SignalVu® AM/FM/PM Audio Signal Analysis (Requires Opt. SVE)
DPOFL-SVE	SignalVu® Essentials – Vector Signal Analysis Software
DPOFL-SVM	SignalVu® General Purpose Modulation Analysis (Requires Opt. SVE)
DPOFL-SVO	SignalVu® Flexible OFDM Analysis (Requires Opt. SVE)
DPOFL-SVP	SignalVu® Advanced Signal Analysis (including pulse measurements) (Requires Opt. SVE)
DPOFL-SVT	SignalVu® Frequency and Phase Settling Time Measurements (Requires Opt. SVE)
DPOFL-SV23	WLAN 802.11a/b/g measurement application (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
DPOFL-SV24	WLAN 802.11n measurement application (Requires Opt. SVE and SV23) (For models of bandwidth ≥2.5 GHz only)
DPOFL-SV26	SignalVu® APCO P25 measurements (Requires Opt. SVE)
DPOFL-SV27	SignalVu® Bluetooth Basic LE TX SIG measurements (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
DPOFL-SV28	SignalVu® LTE Downlink RF measurements (Requires Opt. SVE) (For models of bandwidth ≥1 GHz only)
DPOFL-USB2	USB 2.0 Automated Compliance Test Application (Requires TDSUSBF USB Test Fixture) ≥2 GHz bandwidth required for high-speed USB.
DPOFL-USBPWR	Automated compliance test solution for USB power adapters
DPOFL-XGBT2	TekExpress Automated 10GBASE-T Compliance Test Software (Requires TF-XGbt Test Fixture) (For DPO7354C model only)

Power plug options

Opt. A0	North America power plug (115 V, 60 Hz)
Opt. A1	Universal Euro power plug (220 V, 50 Hz)
Opt. A2	United Kingdom power plug (240 V, 50 Hz)
Opt. A3	Australia power plug (240 V, 50 Hz)
Opt. A5	Switzerland power plug (220 V, 50 Hz)
Opt. A6	Japan power plug (100 V, 50/60 Hz)
Opt. A10	China power plug (50 Hz)
Opt. A11	India power plug (50 Hz)

Opt. A12	Brazil power plug (60 Hz)
Opt. A99	No power cord

Language options

Opt. L0	English manual
Opt. L1	French manual
Opt. L3	German manual
Opt. L5	Japanese manual
Opt. L7	Simplified Chinese manual
Opt. L8	Traditional Chinese manual
Opt. L9	Korean manual
Opt. L10	Russian manual

Service options

Opt. C3	Calibration Service 3 Years
Opt. C5	Calibration Service 5 Years
Opt. D1	Calibration Data Report
Opt. D3	Calibration Data Report 3 Years (with Opt. C3)
Opt. D5	Calibration Data Report 5 Years (with Opt. C5)
Opt. G3	Complete Care 3 Years (includes loaner, scheduled calibration, and more)
Opt. G5	Complete Care 5 Years (includes loaner, scheduled calibration, and more)
Opt. R3	Repair Service 3 Years (including warranty)
Opt. R5	Repair Service 5 Years (including warranty)

Probes and accessories are not covered by the oscilloscope warranty and Service Offerings. Refer to the datasheet of each probe and accessory model for its unique warranty and calibration terms.

Recommended accessories

Probes	Tektronix offers over 100 different probes to meet your application needs. For a comprehensive listing of available probes, please visit www.tek.com/probes.
TAP3500	3.5 GHz TekVPI active single-ended probe
TAP2500	2.5 GHz TekVPI active single-ended probe
TAP1500	1.5 GHz TekVPI active single-ended probe
TDP3500	3.5 GHz TekVPI differential voltage probe with ±2 V differential input voltage
TDP1500	1.5 GHz TekVPI differential voltage probe with ±8.5 V differential input voltage
TDP1000	1 GHz TekVPI differential voltage probe with ±42 V differential input voltage
TDP0500	500 MHz TekVPI differential voltage probe with ±42 V differential input voltage
TCP0150	20 MHz TekVPI™ 150 Ampere AC/DC current probe
TCP0030A	120 MHz TekVPI 30 Ampere AC/DC current probe
TCP0020	50 MHz TekVPI 20 Ampere AC/DC current probe
TRCP0300	30 MHz, 250 mA to 300 A, AC current probe
TRCP0600	30 MHz, 500 mA to 600 A, AC current probe

TRCP3000	16 MHz, 500 mA to 3000 A, AC current probe
TMDP0200	±750 V, 200 MHz high-voltage differential probe
THDP0200	±1.5 kV, 200 MHz high-voltage differential probe
THDP0100	±6 kV, 100 MHz high-voltage differential probe
P5100A	2.5 kV, 500 MHz, 100X high-voltage passive probe
P6015A	20 kV, 75 MHz high-voltage passive probe
P6158	3 GHz, 20X low-capacitance passive probe

Accessories

077-0076-xx	Service Manual, pdf on hard drive (pdf only)
077-0010-xx	Programmer Manual (pdf only)
077-0063-xx	Performance Verification and Specification (pdf only)
016-1985-xx	Rackmount Kit
065-0918-xx	Removable solid state drive
065-0917-xx	Removable HD Spare with rotational media
016-1979-xx	Front HD option for Rackmount Kit
119-7083-xx	Mini Keyboard (USB interface)
119-7275-xx	Mini multimedia keyboard
016-1970-xx	Transit Case
K420	Oscilloscope Cart
DPO7AFP	Auxiliary front panel

Cables

012-0991-xx	GPIB Cable (1 m)
012-0991-xx	GPIB Cable (2 m)

Test fixtures

067-1686-xx	Probe Calibration / Power Deskew Test Fixture
TDSUSBF	Test Fixture for use with Opt. USB2
TF-BRR-CFD	Automotive Ethernet Compliance Clock Frequency Divider fixture
TF-GBE-ATP	10/100/1000BASE-T Advanced Test Package (consists of test fixture PCB set, RJ45 interconnect cable, and 1000BASE-T jitter test channel cable)
TF-GBE-BTP	10/100/1000BASE-T Basic Test Package (consists of test fixture PCB set and RJ45 interconnect cable)
TF-GBE-EE	Additional test fixture for Energy Efficient Ethernet measurements. Order through Crescent Heart Software (http://www.c-h-s.com)

Adapters

TPA-BNC	TekVPI-to-TekProbe BNC Adapter
P6701B	Optical/Electrical Converter (Multi Mode). Requires TekVPI® to TekProbe BNC adapter (TPA-BNC).
P6703B	Optical/Electrical Converter (Single Mode). Requires TekVPI® to TekProbe BNC adapter (TPA-BNC).

Software

TekScopeNL-BAS	TekScope Anywhere™ Waveform Analysis and Visualization Node locked license.
TekScopeFL-BAS	TekScope Anywhere™ Waveform Analysis and Visualization floating license.
TekScopeNL-DJA	Advanced Jitter Analysis for TekScope Anywhere™ Node locked license.
TekScopeFL-DJA	Advanced Jitter Analysis for TekScope Anywhere™ floating license.
GRL-USB-PD	USB Power Delivery electrical compliance and decode.

Upgrade options

To upgrade your DPO7000C Series oscilloscope, order DPO-UP and option listed below. For example, DPO-UP DDRA.

To upgrade record length:

RL25	From standard 25M/channel configuration to Opt. 5RL configuration
RL210	From standard 25M/channel configuration to Opt. 10RL configuration
RL510	From Opt. 5RL configuration to Opt. 10RL configuration

To add a Solid State Hard Disk Drive:

SSD	Add an additional removable Solid State Drive (customer installable)

To upgrade to a higher-capacity Hard Disk Drive:

HDD7	Add an additional higher-capacity removable Hard Disk Drive (customer installable)

To upgrade DPO7000C Series with:

BRR	Add Opt. BRR - BroadR-Reach/100BASE-T1 Compliance Testing (Requires TF-GBE-BTP and TF-BRR-CFD Test Fixtures) (For models of bandwidth ≥1 GHz only)
DDRA	Add Option DDRA (Requires Opt. DJA) (For models of bandwidth ≥1 GHz only)
DJAM	Add Opt. DJA – Jitter and Eye Analysis Tools - Advanced (DPOJET)
DJAN	Add Opt. DJAN - DPOJET Noise, jitter, and eye analysis tools (Requires Opt. DJA)
D-PHY	Add Opt. D-PHY – MIPI® D-PHY Transmitter Debug, Characterization, and Compliance Test Solution (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only)
ET3	Add Opt. ET3 – Ethernet Compliance Testing (Requires TF-GBE-BTP or TF-GBE-ATP Ethernet Test Fixture)
HSIC	Add Opt. HSIC - USB HSIC protocol decode and electrical validation (Requires Opt. DJA) (For models of bandwidth ≥2.5 GHz only.)
MOST	Add Opt. MOST – MOST Essentials - Electrical Compliance and Debug Test Solution for MOST50 and MOST150 (Requires Opt. DJA)
MTM	Add Opt. MTM – Mask Testing
NBASE-T	Add Opt. NBASE-T TekExpress Automated NBASE-T and IEEE802.3bz (2.5G and 5G) Compliance Test Software (Requires TF-XGbt Test Fixture) (For models of bandwidth ≥2.5 GHz only)
PWR	Add Opt. PWR – Power Measurement and Analysis
SR-AERO	Add Opt. SR-AERO – Aerospace Serial Triggering and Analysis (MIL-STD-1553). Enables triggering on packet-level information on MIL-STD-1553 buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding
SR-AUTO	Add Opt. SR-AUTO – Automotive Serial Triggering and Analysis (CAN/LIN/FlexRay). Enables triggering on packet-level information on CAN, LIN, and FlexRay buses as well as analytical tools such as digital views of the signal, bus views, and packet decoding
SR-COMP	Add Opt. SR-COMP – Computer Serial Triggering and Analysis (RS-232/422/485/UART)
SR-DPHY	Add Opt. SR-DPHY – MIPI® D-PHY Serial Analysis (DSI-1 and CSI-2)
SR-EMBD	Add Opt. SR-EMBD – Embedded Serial Triggering and Analysis (I^2C, SPI)
SR-ENET	Add Opt. SR-ENET – Ethernet Serial Analysis (10BASE-T, 100BASE-TX)
SR-PCIE	Add Opt. SR-PCIE – PCI Express Serial Analysis. Enables analysis of PCI Express buses with analytical tools such as digital views of the signal, bus views, and packet decoding (For models of bandwidth ≥1 GHz only) (Due to large volumes of data, use of standard high-capacity hard drive rather than the smaller SSD is recommended.)
SR-USB	Add Opt. SR-USB – USB 2.0 Serial Triggering and Analysis (LS, FS, HS)
SR-810B	Add Opt. SR-810B – 8b/10b Serial Analysis. Enables analysis of 8b/10b buses with analytical tools such as digital views of the signal, bus views, and packet decoding
SSD	Add Opt. SSD – Solid State Hard Drive
ST1G	Add Opt. ST1G – 64-bit NRZ Serial Trigger and 8b/10b Serial Protocol Decode (includes Opt. SR-810B) (For models of bandwidth ≥2.5 GHz only)
SVEM	Add Opt. SVE – SignalVu Essentials Vector Signal Analysis

SVA	Add Opt. SVA – SignalVu AM/FM/Direct Audio Measurements (Requires Opt. SVE)
SVM	Add Opt. SVM – SignalVu General Purpose Modulation Analysis (Requires Opt. SVE)
SVO	Add Opt. SVO– SignalVu Flexible OFDM Analysis (Requires Opt. SVE)
SVP	Add Opt. SVP – SignalVu Pulse Advanced Signal Analysis (Requires Opt. SVE)
SVT	Add Opt. SVT – SignalVu Settling Time Measurements - Frequency and Phase (Requires Opt. SVE)
SV23	Add Opt. SV23 - WLAN 802.11a/b/g measurement application (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
SV24	Add Opt. SV24 - WLAN 802.11n measurement application (Requires Opt. SVE and SV23) (For models of bandwidth ≥2.5 GHz only)
SV26	Add Opt. SV26 - SignalVu® APCO P25 measurements (Requires Opt. SVE)
SV27	Add Opt. SV27- SignalVu® Bluetooth Basic LE TX SIG measurements (Requires Opt. SVE) (For models of bandwidth ≥2.5 GHz only)
SV28	Add Opt.SV28 - SignalVu® LTE Downlink RF measurements (Requires Opt. SVE) (For models of bandwidth ≥1 GHz only)
USB2	Add Opt. USB2 – USB 2.0 Automated Compliance Test Application (Requires TDSUSBF (USB Test Fixture). ≥2 GHz bandwidth required for high-speed USB)
USBPWR	Add Opt. USBPWR - Automated compliance test solution for USB power adapters
XGBT2	Add Opt. XGBT2 - TekExpress Automated 10GBASE-T Compliance Test Software (Requires TF-XGbt Test Fixture) (For DPO7354C model only)

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Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

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* European toll-free number. If not accessible, call: +41 52 675 3777

For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tek.com.

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