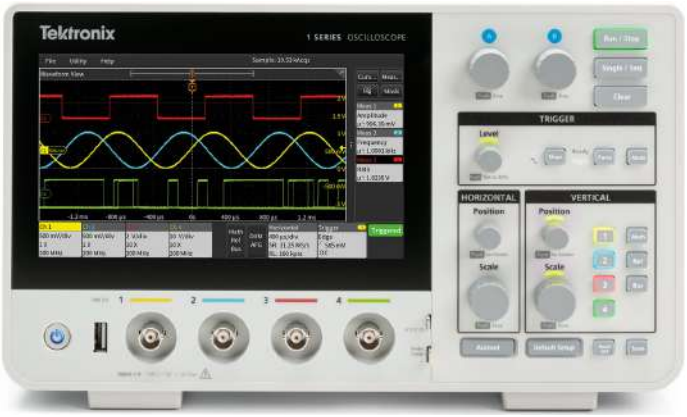
1 Series DPO

Digital Oscilloscope Datasheet



All the essentials and more

The 1 Series DPO features up to 4 analog channels, 200 MHz bandwidth, 1.25 GS/s sample rate, optional 25 MHz Arbitrary Function Generator (AFG), frequency counter, digital voltmeter, advanced triggers, and protocol decode, all in a compact form factor. The 1 Series DPO has all the essentials you need to learn and work.

With a capacitive touchscreen and a highly intuitive user interface truly designed for touch, the 1 Series DPO completes the Tektronix family of oscilloscopes with its shared user interface and programmatic interface. This makes it even easier to use any Tektronix next generation oscilloscope.

A large catalog of compatible probes and accessories extend the 1 Series DPO capabilities and versatility to make it suitable for a variety of applications.

Key performance specifications

Analog input channels

2 or 4 inputs

Bandwidth

50 MHz, 70 MHz, 100 MHz, 200 MHz

Sample rate

- 1.25 GS/s half channels
- 625 MS/s all channels

Waveform capture rate

Up to 125 kwfm/s

Record length

10 Mpoints per channel

Vertical resolution

12-bit ADC

Standard trigger types

Edge, pulse width, runt, timeout, and rise/fall time

Standard analysis

- **Cursors:** Waveform, V bars, H bars, and V&H bars
- **Measurements:** 23
- **Plots:** XY, limit mask
- **Math:** Basic waveform arithmetic, FFT, and advanced equation editor

Serial trigger, decode and analysis

I^2C, SPI, and UART (RS-232/422/485)

Additional features

- 5-digit digital voltmeter
- 6-digit frequency counter

Arbitrary function generator (S models only)

- 25 MHz waveform generator
- **Waveform types:** Arbitrary, sine, square, pulse, ramp, DC level, and random noise
- **Waveform modulation:** AM, FM, ASK, FSK, Sweep

Display

- 7-inch color display
- Capacitive touchscreen
- WSVGA 1024 × 600 resolution

Connectivity

- USB 2.0 Device (one port)
- USB 2.0 Host (one port)
- LAN (10/100 Base-T Ethernet)

Remote control

Remotely view and control the oscilloscope over a network connection through eScope

VESA mount

100 mm × 100 mm VESA interface

Security

- Kensington-style security slot
- EUCRA compliant

Standard probes

- One P2101 100 MHz, 1X/10X voltage probe per channel (50 MHz, 70 MHz, and 100 MHz bandwidth models)
- One P2201 200 MHz, 1X/10X voltage probe per channel (200 MHz bandwidth model)

Collaborative tools (optional)

TekScope PC Analysis Software: TekScope™ PC lets you view and analyze waveforms, perform many types of measurements and decode the most common serial buses — all while remotely accessing your oscilloscope. Advanced license options add capabilities such as multi-scope analysis, more serial bus decoding options, jitter analysis and power measurements.

Optional accessories

- Soft carrying case
- Rackmount kit
- Hard case

Warranty

One year standard

Tektronix next generation oscilloscopes



1 Series DPO	2 Series MSO	3 Series MDO	4 Series B MSO	5 Series B MSO	6 Series B MSO	7 Series DPO
Small footprint with all the essentials	Compact, portable, battery-operated instrument	Extreme versatility for any bench — includes a spectrum analyzer	Up to 6 analog channels of high-visibility measurements	Up to 8 analog and/or 32 digital channels of advanced analysis	Unmatched detail on high-speed signals	Unparalleled signal fidelity



Easy touchscreen with simplified front panel

The 1 Series DPO offers the same interface as the higher-end Tektronix oscilloscopes, scaled to fit the smaller touchscreen.

- Drag waveforms left/right or up/down to adjust horizontal and vertical position or to pan a zoomed view.
- Swipe in from the right to reveal the results bar or down from the top to access the menus in the upper left corner of the display.



Interact with the capacitive touch display.

The simplified front panel retains critical buttons and knobs with color-coded LEDs, allowing quick access and easy adjustment of the most frequently used instrument settings.



Simplified and intuitive front panel with color-coded LEDs.

The combination of a streamlined front panel with an intuitive touch interface makes it easy for any new engineer to self-discover and begin using the instrument.

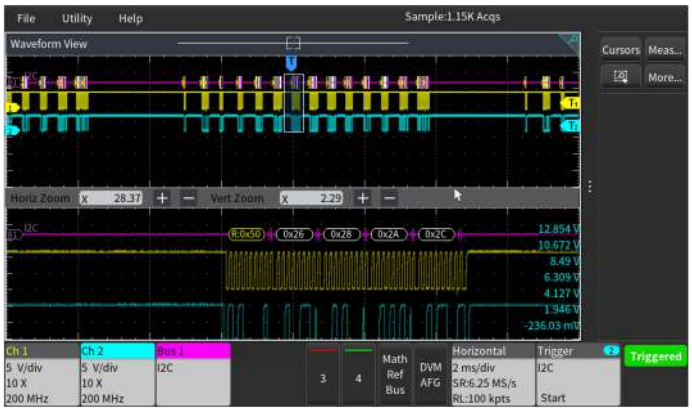
Work smarter with the intuitive UI

The user interface on the 1 Series DPO is designed for touch operation. All the key information is presented as a series of badges with visual cues. Get immediate access to instrument configuration or waveform management tasks with a single tap. A USB mouse is also supported and can be used as an interaction method with the instrument.

The 1 Series DPO offers a comprehensive set of standard analysis tools including:

- Waveform and screen-based cursors with user-selectable readout location.
- Common automated measurements with measurement statistics and gating.
- Basic and advanced waveform math, including arbitrary equation editing.
- Basic FFT analysis with options to view magnitude and options to customize window type and units. Works simultaneously across all analog channels.

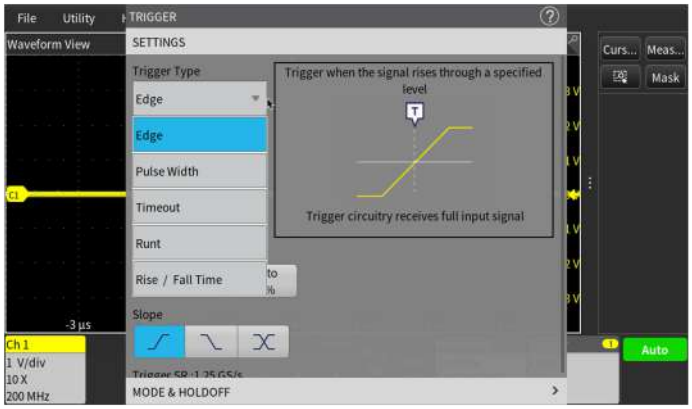
The 1 Series DPO screen also displays plots, measurement results tables, bus decode tables, and more. You can easily resize and relocate the views to suit your needs.



Work smarter with the intuitive UI.

Triggering

Discovering a device fault is only the first step. Next, you must capture the event of interest to identify the root cause. The 1 Series DPO provides a complete set of advanced triggers, including runt, pulse width, timeout, rise/fall time, and serial packet data, that can be used to capture complex infrequent events.



Trigger menu.

Limit mask testing

Limit mask testing offers a good way to test the quality of a signal. A mask can be defined based on a golden signal with user-defined tolerances on the screen.

The 1 Series DPO provides a comprehensive set of mask tools that allow you to:

- Define test duration in number of waveforms
- Set a violation threshold that must be met before considering a test failure
- Count violations and failures and report statistical information



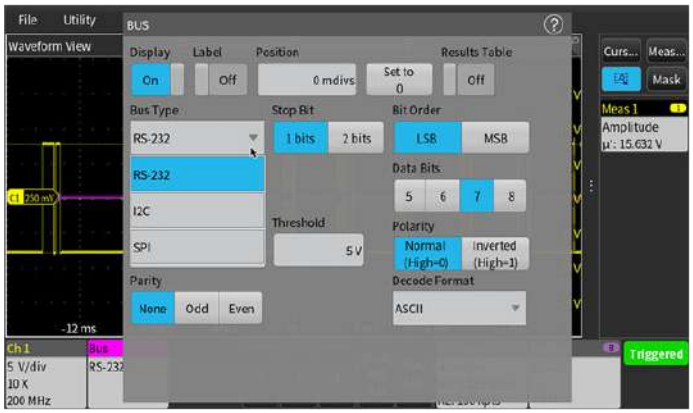
Limit mask testing.

Serial protocol triggering and analysis

The 1 Series DPO offers a robust set of tools for working with serial buses found in embedded design, including I^2C, SPI, and RS-232/422/485/UART.

The protocol decode and triggering capability is invaluable for tracing the flow of activity through a system by observing the traffic on a serial bus.

- Serial protocol triggering lets you trigger on specific packet content, including start of packet, specific addresses, specific data content, unique identifiers, and errors.
- Bus waveforms provide a higher-level, combined view of the individual signals of your bus, such as clock, data, and chip enable. This makes it easy to identify where packets begin and end and identify sub-packet components such as address, data, identifier, and CRC.
- The bus waveform is time-aligned with all other displayed signals, making it easy to measure timing relationships across various parts of the system under test.
- The bus decode table provides a tabular view of all decoded packets in an acquisition. Packets are timestamped and listed consecutively with columns for each component, such as address and data.



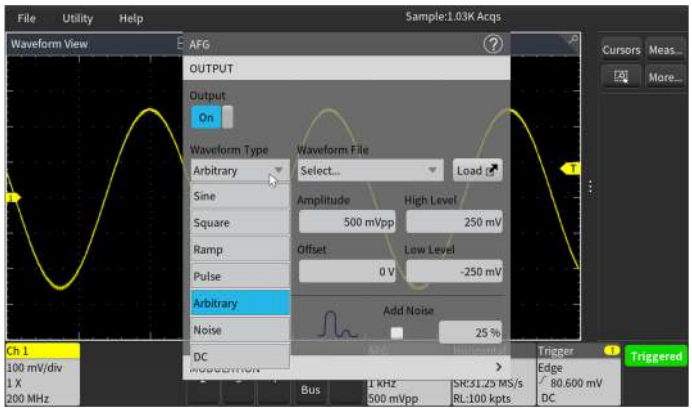
Bus menu provides options to configure the bus parameters.

Arbitrary function generator (S models only)

The 1 Series DPO (S models only) includes a 25 MHz arbitrary function generator (AFG) for creating signals in a design or adding noise to signals to perform margin testing.

Several predefined waveforms, including sine, square, pulse, ramp/triangle, DC, and noise, are included. In addition, the AFG also provides waveform modulation capability, including AM, FM, ASK, FSK, and Sweep.

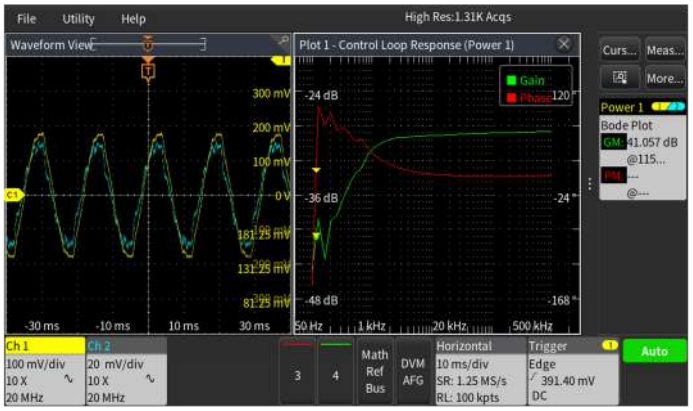
The arbitrary waveform generator provides the ability to load saved waveforms from the analog input to replay on the AFG.



Built-in AFG (S model only) with flexible settings and a wide variety of waveform types.

Bode plot (S models only)

Analyze the frequency response of a system using the built-in Bode plot feature. The input voltage is swept across the user-selected range using the internal AFG. The gain and phase of the output relative to the input voltage is plotted at each point.

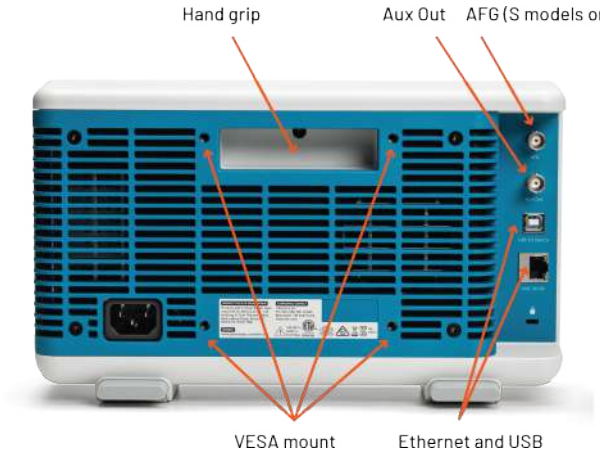


Bode plot for frequency response analysis.

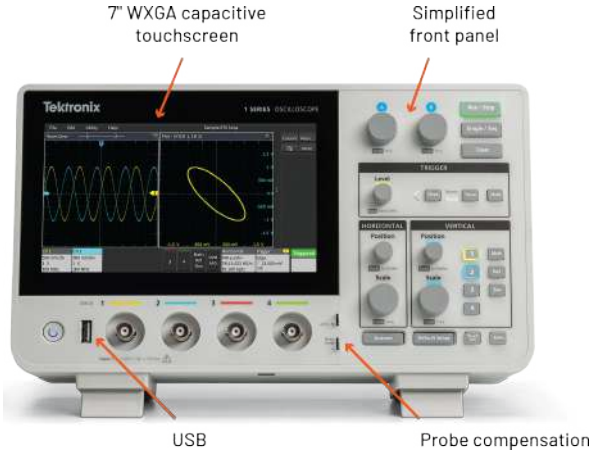
Connectivity

The 1 Series DPO contains several ports that you can use to connect the instrument to a network, directly to a PC, or to other test equipment.

- USB 2.0 host port on the front of the instrument enables easy transfer of screenshots, instrument settings, and waveform data to a USB mass storage device. A USB mouse can also be attached for instrument control.
- The USB device port allows you to control the oscilloscope remotely from a PC using an automation script through programmatic interface commands.
- The standard 10/100BASE-T ethernet port enables easy connection to networks and remote control of the instrument. It also enables you to view the acquired data through eScope or an automation script through programmatic interface commands.



Port and mounting locations on the rear panel.



Front panel connections and features.

Enhanced security

The 1 Series DPO offers:

- Security slot that is compatible with Kensington-style locks to physically anchor the instrument.
- TekSecure Erase function to erase all user-specific data and set all settings to default values.
- Network Security that can turn off the ethernet port and provide eScope access that is password protected.
- Compliance with EUCRA.

VESA mount

The 1 Series DPO has an industry standard VESA mount that is compatible with off-the-shelf accessories.



1 Series DPO mounted on an arm using VESA.

Accessories

Several accessories are available for use with the 1 Series DPO:

- Install the instrument in a rack for production with the rackmount kit.
- Carry the instrument into the field using the soft case.
- Provide additional protection when shipping with the hard case, which comes with foam inserts.

The 100 mm × 100 mm standard VESA interface on the back of the instrument is compatible with a wide variety of commercial accessories.



Soft carrying case.



Rackmount kit.



Hard carrying case.

Programmatic interface

Programmable interface commands can be used to remotely control the instrument through the USB device port or the ethernet port. This enables programming the instrument to perform an automated set of tasks or integrating into a larger system that includes other equipment for performing specific tasks.

eScope

To use the eScope feature, simply connect the oscilloscope to a network using the ethernet port on the oscilloscope. Enter the scope's IP address into a web browser and select the eScope instrument control panel from the home screen.

An exact replica of the oscilloscope's screen appears on the browser. Now professors and students can control all aspects of the oscilloscope using just a mouse.

Educational features

Help when you need it, where you need it

The 1 Series DPO includes several helpful resources to get your questions answered rapidly without having to find a manual or go to a website:

- Graphical images and explanatory text are used in numerous menus to provide quick feature overviews.
- All menus include a question mark icon in the upper right that takes you directly to the integrated help system. View the information on the scope or use the QR code to access the Help file on your mobile device. This allows you to view the information and the oscilloscope screen simultaneously.
- The "Getting acquainted with your instrument" section in the Help menu enables you to come up to speed with the instrument in a few minutes.

Demo menu

The 1 Series DPO Demo screen has a unique QR code that opens the 1 Series DPO Resource webpage. This contains multiple demo videos and information to get you started with your oscilloscope.

Feature control

The 1 Series DPO offers new ways to enable educators to devote more time to teaching circuit concepts instead of lab setup and management.

Educators can disable autoset, cursors, and automated measurements on the instruments. This allows students to focus on the basic concepts and helps them understand how to use the horizontal and vertical controls to get the waveform display, use the graticule to measure time and voltage, and manually plot/calculate the signal characteristics.



Demo menu.

Other products to complete your bench



Arbitrary Function Generator (AFG1000)

AFG1022 (25 MHz)

AFG1062 (60 MHz)

- 2 output channels
- 1 mVpp to 10 Vpp
- 50 built-in arbitrary waveforms
- Built-in 200 MHz 6-digit frequency counter



Keithley DMM6500 6.5 Multimeter

DMM6500

- 15 measurement functions, including capacitance, temperature, and digitizing
- Expanded measurement range
- Large internal memory stores up to 7 million readings



Keithley 2220/2230 Multiple Output Power Supply

2231A-30-3 (3 outputs, 3 A maximum)
2220-30-1 (2 outputs, 1.5 A maximum)
2230-30-1 (3 outputs, 5 A maximum)

- Multiple outputs
- All channels independently controlled and isolated
- Remote sensing channels

Specifications

All specifications are typical unless noted otherwise. Specifications that are marked with the ✔ symbol are guaranteed and can be checked using the procedures in the *1 Series DPO Specifications and Performance Verification* manual, available on tek.com. All specifications apply to all models unless noted otherwise.

Model overview

Model								
No AFG With AFG	**DPO1052 DPO1052S**	**DPO1072 DPO1072S**	**DPO1102 DPO1102S**	**DPO1202 DPO1202S**	**DPO1054 DPO1054S**	**DPO1074 DPO1074S**	**DPO1104 DPO1104S**	**DPO1204 DPO1204S**
Analog channels	2				4			
Analog channel bandwidth ✔	50 MHz	70 MHz	100 MHz	200 MHz	50 MHz	70 MHz	100 MHz	200 MHz
Sample rate	1.25 GS/s half channels 625 MS/s all channels							
Record length	10 Mpoints per channel							
Waveform capture rate	More than 125,000 waveforms per second							
Vertical resolution	12 bits							
AFG output (S models only)	1							

Processor system

Operating system	Closed Linux

Vertical system analog channels

Bandwidth selection	20 MHz and full instrument bandwidth based on model (50 MHz, 70 MHz, 100 MHz, 200 MHz) (limited by instrument bandwidth)
Input coupling	AC, DC
Input impedance	1 MΩ ± 0.02 MΩ
Input capacitance	1 MΩ DC coupled, typical, 17 pF (+1 pF / −2 pF)
Input sensitivity range	1 mV/div to 10 V/div
Vertical resolution	12 bit
Maximum input voltage	135 V_{RMS}, −400 V ≤ peak ≤ +400 V, CAT II
DC gain accuracy ✔	**<5 mV/div:** ±3% full scale **≥5 mV/div:** ±2% full scale
Offset range	**1 mV/div to 50 mV/div:** ±2 V **55 mV/div to 1 V/div :** ±25 V **1.1 V/div to 10 V/div :** ±250 V

Horizontal system analog channels

Timebase range	2 ns/div to 1 ks/div (70 MHz, 100 MHz, and 200 MHz bandwidth models) 4 ns/div to 1 ks/div (50 MHz bandwidth model)
Timebase delay range	−8 divisions to 4000 s
Timebase accuracy ✔	±25 ppm over any ≥1 ms interval (guaranteed for 10 years after factory calibration)

Trigger system

Trigger modes	Auto, normal, and single
Trigger coupling	**DC:** All signals can pass **HF reject:** Suppress high-frequency components of signals above 40 kHz **LF reject:** Suppress low-frequency components of signals below 40 kHz **Noise reject:** Reduce false triggering and improve trigger reliability on noisy signals
Trigger holdoff range	0 s to 10 s
Trigger sensitivity	Edge type, DC coupled, any analog input channel: ▪ **At all coarse vertical settings:** < 0.5 divisions + 10% ▪ **At all fine vertical settings:** < 0.5 divisions of the next largest coarse setting + 10%

Trigger types	**Edge:** Positive, negative, or either slope on any channel. **Pulse Width:** Trigger on width of positive or negative pulses. Event can be greater than (>), less than (<), and inside range with width at 0.8 ns to 4 s **Timeout:** Trigger on an event that stays high, stays low, or either. The time limit is between 3.2 ns to 10 s on analog channels. **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 (<, >, or occurs). Polarity can be positive or negative. (3.2 ns to 10 s) **Rise/Fall:** Trigger on pulse edge rates that are faster, slower, or in the range of the specified time. Slope may be positive or negative. **Bus:** ▪ **I2C:** Trigger on start, repeated start, stop, missing ack, address (7 or 10 bit), data, or address and data on I^2C buses up to 10 Mb/s ▪ **SPI:** Trigger on start or data (1 to 16 words) on SPI buses up to 20 Mb/s ▪ **RS-232/422/485/UART:** Trigger on start bit, end of packet, data, and parity error up to 15 Mb/s

Acquisition system modes

Sample	Acquire sample values
High Res	Apply a unique bandwidth filter for each sample rate that maintains the maximum bandwidth possible for that sample rate while preventing aliasing and removing noise from the oscilloscope amplifiers and ADC above the usable bandwidth
Average	Average of a series of acquired waveforms up to 8192 acquisitions

Waveform measurements

Cursors	Waveform, V bars, H bars, and V&H bars
Automatic measurements	23, with up to 21 that can be displayed as either individual measurement badges or collectively in a measurement results table
Amplitude measurements	Amplitude, maximum, minimum, peak-to-peak, positive overshoot, negative overshoot, mean, RMS, AC RMS, top, base, and area
Time measurements	Period, frequency, rise time, fall time, +width, -width, +duty, -duty, burst width, setup time, hold time
Bode plot (FRA) (S model only)	**Frequency:** ▪ **Start:** 50 Hz to 25 MHz ▪ **Stop:** 60 Hz to 25 MHz **Amplitude (peak-to-peak):** ▪ **High-Z:** 20 mV to 5 V ▪ **50 Ω:** 10 mV to 2.5 V
Measurement statistics	Mean, standard deviation, maximum, minimum, and population
Reference levels	User-definable reference levels for automatic measurements can be specified in either percent or units. Reference levels can be set to global for all measurements or per source channel
Gating	None, screen, or cursors specify the region of acquisition in which to take measurements

Waveform math

Number of math waveforms	Up to 4
Arithmetic	Add, subtract, multiply, and divide
Math functions	Integrate, differentiate, log 10, log e, square root, exponential, absolute value, FFT magnitude
Relational	Boolean result of comparison >, <, ≥, ≤, =, and ≠
Logic	AND, OR, NAND, NOR, XOR, and EQV
FFT	Spectral magnitude
FFT units	**Magnitude:** Linear and log (dBm)
FFT window functions	Kaiser-Bessel, Gaussian, Rectangular, Hamming, Hanning, Blackman-Harris, Flattop2, TekExp

Arbitrary function generator

Number of channels	1
Operating modes	Continuous
Waveforms	Sine, square, pulse, ramp, arbitrary, dc, and noise

Amplitude and frequency range

Signal type	Amplitude range 50 Ω	Amplitude range 1 MΩ	Frequency range
Sine	10 mV to 2.5 V	20 mV to 5 V	1 µHz to 25 MHz
Square	10 mV to 2.5 V	20 mV to 5 V	1 µHz to 10 MHz
Pulse	10 mV to 2.5 V	20 mV to 5 V	1 µHz to 10 MHz
Ramp	10 mV to 2.5 V	20 mV to 5 V	1 µHz to 400 kHz
DC level (offset)	−1.25 V to 1.25 V	−2.5 V to 2.5 V	—
Random noise	10 mV to 2.5 V	20 mV to 5 V	—
Arbitrary	10 mV to 2.5 V	20 mV to 5 V	1 µHz to 5 MHz

AM / FM modulation characteristics	**Carrier wave:** Sine, square, pulse, ramp, and arbitrary **Source:** Internal **Modulated wave:** Sine, square, rising ramp, falling ramp, noise, arbitrary wave **Modulation frequency:** 2 mHz to 50 kHz **Modulation depth:** 0% to 120%

ASK modulation characteristics	**Carrier wave:** Sine, square, pulse, ramp, and arbitrary **Modulated wave:** Square wave (duty ratio 50%) **Modulation frequency:** 2 mHz to 50 kHz
FSK modulation characteristics	**Carrier wave:** Sine, square, pulse, ramp, and arbitrary **Modulated wave:** Square wave (duty ratio 50%) **Modulation frequency:** 2 mHz to 50 kHz **Hop frequency:** 0 Hz to 25 MHz
Sweep	**Mode:** Linear, logarithmic **Sweep time:** 1 ms to 500 s **Start and stop frequency:** Any frequency within the range of the waveform
DC offset	**DC offset range:** ±2.49 V into High-Z, ±1.245 V into 50 Ω **DC offset resolution:** ≤1 mV into High-Z, ≤500 µV into 50 Ω **DC offset accuracy ✔ :** ± (offset set value × 5% + 2 mV)

Additional features

Digital voltmeter	DC, AC+DC RMS, AC RMS; 5-digit resolution
Frequency counter	Frequency, maximum 6-digit resolution

Display

Display type	7-inch multi-touch capacitive display
Display resolution	WSVGA 1024 × 600
Display mode	Overlay
Zoom	Horizontal and vertical zooming is supported in all waveform views
Interpolation	Sin(x)/x and linear
Waveform styles	Vectors, dots, variable persistence, and infinite persistence
Graticules	Moveable and fixed graticules, selectable between grid, full, and none
Format	YT, XY
Language support	English, Japanese, Simplified Chinese, Traditional Chinese, French, German, Italian, Spanish, Portuguese, Korean

Input/output ports

USB interface	One USB 2.0 host port (front) One USB 2.0 device port (back)
Ethernet interface	One ethernet port, 10/100 Mb/s, LAN (VXI11)

Probe compensation signal, typical	**Amplitude:** 0 V to 2.5 V **Frequency:** 1 kHz **Source impedance:** 110 Ω
Aux out	**Vout (HI):** ≥ 2.5 V open circuit; ≥ 1.0 V into a 50 Ω load to ground **Vout (LO):** ≤ 0.7 V into a load of ≤ 4 mA; ≤ 0.25 V into a 50 Ω load to ground

Security

Security slot	Rear-panel security slot connects to standard Kensington-style lock

Mounting

VESA mount	100 mm × 100 mm VESA interface

Software

Programming examples	Programming with the 1 Series platform has never been easier. With a programmer manual and the Tektronix GitHub repository, you have many commands and examples to help you get started remotely automating your instrument. See github.com/tektronix/programmatic-control-examples.

Power

Line power	(100 V to 240 V) ± 10% at 50 Hz to 60 Hz
Power consumption	45 W (maximum)

Physical characteristics

Dimensions – instrument only	**Height:** 174 mm (6.85 in) **Width:** 291 mm (11.45 in) **Depth:** 102 mm (4.02 in)
Weight – instrument only	2.16 kg (4.8 lb)
Rackmount configuration	4U

EMC, environment, and safety

Temperature – operating	0 °C to 50 °C
Temperature – non-operating	−20 °C to 70 °C
Humidity – operating	5% to 90% relative humidity at temperatures up to 35 °C 5% to 60% relative humidity at temperatures greater than 35 °C and up to 50 °C
Humidity – non-operating	5% to 90% relative humidity at temperatures up to 35 °C 5% to 60% relative humidity at temperatures greater than 35 °C and up to 70 °C
Altitude - operating	Up to 3,000 meters (9,842 feet)

Altitude - non-operating	Up to 15,000 meters (48,212 feet)
Regulatory compliance	For indoor, non-residential use only
EMC	Conforms to European Union EMC Directive (CE-marked) UK EMC Equivalent: Electromagnetic Compatibility Regulations (UKCA-marked) Ukraine EMC Equivalent: Technical Regulations on Electromagnetic Equipment Compatibility (Ukraine-marked) AUS EMC Equivalent: Australia Radiocommunications Act 1992 (RCM-marked) Korea EMC Equivalent: Registration of Broadcasting and Communications Equipment (KCC-marked)
Safety	Conforms to European Union Low Voltage Directive (CE-marked) UK LVD Equivalent: Safety Regulations 2016 (S.I. 2016/1101) amended by SI 2019 No. 696 (UKCA-marked) Ukraine LVD Equivalent: Technical Regulation of Low Voltage Electrical Equipment TR 1067 (Ukraine-marked)
RoHS	Conforms to European Union Restrictions on Hazardous Substances (CE-marked) Conforms to UK RoHS equivalent (UKCA-marked) Conforms to Ukraine RoHS equivalent: (Ukraine-marked) Conforms to China RoHS (China RoHS EFUP marked)

Ordering information

Use the following steps to select the appropriate instrument and options for your measurement needs.

Step 1 – Select instrument model

Select the 1 Series DPO instrument model. Not all models and features are available in all regions.

Model	Description
DPO1052	Digital Oscilloscope: 12-bit 50 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1072	Digital Oscilloscope: 12-bit 70 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1102	Digital Oscilloscope: 12-bit 100 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1202	Digital Oscilloscope: 12-bit 200 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1054	Digital Oscilloscope: 12-bit 50 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1074	Digital Oscilloscope: 12-bit 70 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I2C, SPI, UART; 1-year standard warranty
DPO1104	Digital Oscilloscope: 12-bit 100 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1204	Digital Oscilloscope: 12-bit 200 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, protocol decode I^2C, SPI, UART; 1-year standard warranty

Model	Description
DPO1052S	Digital Oscilloscope: 12-bit 50 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1072S	Digital Oscilloscope: 12-bit 70 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1102S	Digital Oscilloscope: 12-bit 100 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1202S	Digital Oscilloscope: 12-bit 200 MHz, 2 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1054S	Digital Oscilloscope: 12-bit 50 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1074S	Digital Oscilloscope: 12-bit 70 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1104S	Digital Oscilloscope: 12-bit 100 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty
DPO1204S	Digital Oscilloscope: 12-bit 200 MHz, 4 analog ch, 1.25 GS/s, 10 M samples/ch, 25 MHz AFG, protocol decode I^2C, SPI, UART; 1-year standard warranty

Each model includes:

- Probes (one per channel):
  - P2101 100 MHz 1x/10x probe for the 50 MHz, 70 MHz, and 100 MHz models
  - P2201 200 MHz 1x/10x probe for the 200 MHz model
- Installation and safety manual (translated in English, Japanese, and Simplified Chinese)
- Embedded help
- Power cord
- Calibration certificate documenting traceability to National Metrology Institutes and ISO9001 (compliant) quality system registration

Step 2 – Add additional probes and adapters

Add additional recommended probes and adapters.

Passive voltage probes	Description
TPP0100	100 MHz bandwidth, 10X attenuation, BNC interface
TPP0200	200 MHz bandwidth, 10X attenuation, BNC interface
P2221	6 MHz to 200 MHz bandwidth, 1X / 10X attenuation, BNC interface
P6139B	500 MHz bandwidth, 10X attenuation, BNC interface
P6101B	15 MHz bandwidth, 1X attenuation, BNC interface
P3010	100 MHz bandwidth, 10X attenuation, BNC interface

Current probes	Description
TCPA300	Current probe amplifier; 50 Ω feed-through termination (011-0049-XX) is required
With TCP312A	DC to 100 MHz, 1 mA
With TCP305A	DC to 50 MHz, 5 mA
With TCP303	DC to 15 MHz, 5 mA
TCPA400	Current probe amplifier; 50 Ω feed-through termination (011-0049-XX) is required
With TCP404XL	DC to 2 MHz, 1 A
TCP2020	DC to 50 MHz, 10 mA
A621	5 Hz to 50 kHz, 10 mA to 2000 A_{PEAK}
A622	DC to 100 kHz
P6021A	120 Hz to 60 MHz, 2 mA/mV, 10 mA/mV
P6022	935 Hz to 120 MHz, 1 mA/mV, 10 mA/mV
TRCP3000	1 Hz to 16 MHz, 2 mV/A
TRCP0600	12 Hz to 30 MHz, 10 mV/A
TRCP0300	9 Hz to 30 MHz, 20 mV/A
CT1	25 kHz to 1 GHz, 5 mV/mA
CT2	1.2 kHz to 200 MHz, 5 mV/mA
CT6	250 kHz to 2 GHz, 5 mV/mA

High voltage single-ended probe	Description
P5100A	500 MHz bandwidth, 100X attenuation
P6015A	75 MHz bandwidth, 1000X attenuation
P5122	200 MHz bandwidth, 100X attenuation

High voltage differential probe	Description
P5200A	50 MHz bandwidth, 50:1/500:1 attenuation

Step 3 – Select accessories

Add additional recommended accessories.

Optional accessories	Description
1-RK	Rackmount kit
1-SC	Carrying bag
1-HC	Hard carrying case

Step 4 – Select power cord option

Optional accessories	Description
A0	North America power plug (115 V, 60 Hz)
A1	Universal Euro power plug (220 V, 50 Hz)
A2	United Kingdom power plug (240 V, 50 Hz)
A3	Australia power plug (240 V, 50 Hz)
A5	Switzerland power plug (220 V, 50 Hz)
A6	Japan power plug (100 V, 50/60 Hz)
A10	China power plug (50 Hz)
A11	India power plug (50 Hz)
A12	Brazil (60 Hz)
A99	No power cord
E1	Universal euro bundle

Step 5 – Select service options

Protect your investment and your uptime with a service package for your 1 Series DPO.

Optimize the lifetime value of your purchase and lower your total cost of ownership with a calibration and extended warranty plan for your 1 Series DPO. Plans range from standard warranty extensions covering parts, labor, and 2-day shipping to Total Product Protection with repair or replacement coverage from wear and tear, accidental damage, ESD or EOS. See the table below for specific service options available on the 1 Series DPO family of products. Compare factory service plans www.tek.com/services/factory-service-plans.

Additionally, Tektronix is a leading accredited calibration services provider for all brands of electronic test and measurement equipment, servicing more than 140,000 models from 9,000 manufacturers. With 100+ labs worldwide, Tektronix serves as a global partner, delivering tailored whole-site calibration programs with OEM quality at a market price. View whole site calibration service capabilities at www.tek.com/services/calibration-services.

Service options	Description
R3	Three-year total protection plan includes repair or replacement coverage from wear and tear, accidental damage, ESD or EOS plus preventative maintenance. Including a 5-day turnaround time and priority access to customer support
R5	Five-year total protection plan includes repair or replacement coverage from wear and tear, accidental damage, ESD or EOS plus preventative maintenance. Including a 5-day turnaround time and priority access to customer support
T3	Three-year total product protection plan includes all features of extended warranty plan plus complete coverage against accidental damage, user-caused electrical overstress damage, and electrostatic discharge damage.
T5	Five-year total product protection plan includes all features of extended warranty plan plus complete coverage against accidental damage, user-caused electrical overstress damage, and electrostatic discharge damage.
CD1	Calibration with full data report service. Includes traceable calibration with full data report, or functional verification where applicable. Coverage includes 1 calibration event over 3 years.
CD3	Calibration with full data report service for 3 years. Includes traceable calibration with full data report, or functional verification where applicable. Coverage includes 3 calibration events over 3 years.
CD5	Calibration with full data report service for 5 years. Includes traceable calibration with full data report, or functional verification where applicable. Coverage includes 5 calibration events over 5 years.

Additional software for extended functionality

Purchase additional software with flexible licensing to extend the capabilities of your instrument for collaboration and offline analysis. Option bundles with different levels of functionality are being offered to suit different application needs. Each of these bundles can be purchased as a 1-year subscription or as a perpetual license.

Software option	Description
TEKSCOPE-STARTER	TekScope PC software bundles for various applications
TEKSCOPE-ULTIMATE	

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