## **Tektronix**®



## This changes everything.

Introducing the 5 Series MSO.

The largest display. The most channels. The greatest experience.







Pinch-swipe-zoom touchscreen



4, 6, or 8 FlexChannel® inputs



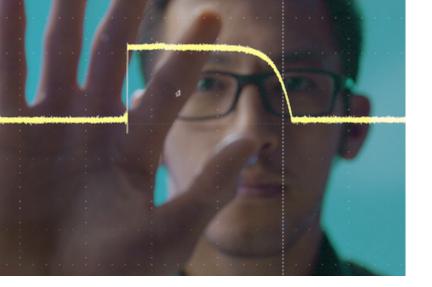
12-bit analog to digital converters



350 MHz to 2 GHz bandwidth



Starting at \$12k



## More than a remarkably intuitive user interface: a delightful experience.

Get the big picture and take total control, with the 15.6-inch HD touchscreen display. Use the capacitive pinch-zoom-swipe touchscreen, front panel controls, or mouse to analyze and manage multiple signals without fighting through menus.



Swipe to navigate through signals



Pinch to scale waveforms



Drag-and-drop cursors and measurements

## Let no detail go unseen, with up to 16 bits of vertical resolution.

12-bit analog to digital converters deliver up to 16 bits of vertical resolution using advanced digital signal processing. See and measure small signal details, even if they're riding on large signals.

## Buy what you need now. Add on as your needs change.

## Performance

Bandwidth up to 2 GHz Record Length up to 125 Mpoints

## Digital Inputs

TLP058 Logic Probes each provide 8 digital channels

## Operating System

Add Windows 10 OS to run PC software on the scope

## Signal Generation

Add a built-in Arbitrary/Function Generator

## Serial Bus Decode/Trigger

Support for key buses like I<sup>2</sup>C, SPI, USB 2.0, Ethernet, CAN, LIN, and many others

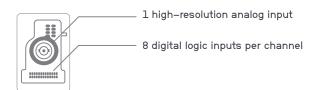
## **Advanced Analysis**

Automated power supply measurement and analysis Comprehensive jitter decomposition and eye-diagram analysis

## Don't run out of channels.

Available with 4, 6, or 8 FlexChannel® inputs. Each can be used to look at 1 high-resolution analog waveform or 8 digital logic waveforms, just by changing the probe.

## FlexChannel Input



## NEW

- Automated power measurements
- SENT bus decode/trigger
- Automotive Ethernet compliance
- Aerospace bus decode/trigger

## FlexChannel inputs -

 1 analog or 8 digital signals each

## Available bandwidth (upgradeable)

- 350 MHz
- 500 MHz
- 1 GHz
- 2 GHz

## Powerful Analysis

- · 36 standard measurements with trend, histogram, and spectrum plots
- · Advanced Jitter Analysis option
- · NEW! Power Measurement option

15.6" HD (1,920 x 1,080) display w/ capacitive touchscreen

## Next generation user interface designed for both touch and mouse

- Provides simple, intuitive scope operation
- Access controls directly through objects on the display rather than navigating menus to get to menus

## Record length

- · 62.5 Mpts Standard
- · 125 Mpts Optional

12-bit ADCs and new High Res mode offer up to 16-bit vertical resolution

# **Tektronix** 5 SERIES MIXED SIGNAL OSCILLOSCOPE Results Table Plot

Protocol options

Serial bus trigger and analysis

- · I<sup>2</sup>C/SPI
- · RS-232/UART
- · CAN/CAN FD/LIN/FlexRay
- · USB 2.0

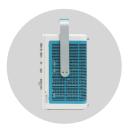
- Ethernet
- · Audio
- · NEW! Aerospace
- · NEW! SENT

## When removable SSD w/ Windows 10 license is:

- · Installed: scope boots as open Windows OS (w/ desktop)
- · Not installed: scope boots as a dedicated scope

Built in Arbitrary/Function Generator option







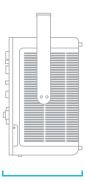






H: 12.2" (309 mm)

W: 17.9" (454 mm)



D: 8.0" (204 mm)

NEW! The 5 Series MSO is now available in a low-profile rackmount version called MSO58LP.

## Strength in numbers.

## Input Channels

4, 6, or 8 FlexChannel inputs Each FlexChannel® provides 1 analog signal input, or 8 digital logic inputs with TLP058 logic probe

## Bandwidth1

350 MHz. 500 MHz. 1 GHz. 2 GHz

## Sample Rate

Real-time: 6.25 GS/s on all analog / digital channels Interpolated: 500 GS/s

## Record Length

62.5 Mpoints standard on all analog / digital channels 125 Mpoints optional on all analog / digital channels<sup>1</sup>

### Vertical Resolution

12-bits standard, up to 16-bits in High Res mode

## Trigger Types

Edge, Pulse Width, Runt, Timeout, Window, Logic, Setup & Hold, Rise/Fall Time, I2C1, SPI1, USB1, Ethernet1, CAN1, CAN FD1, LIN1, FlexRay<sup>1</sup>, RS-232/422/485/UART<sup>1</sup>, I<sup>2</sup>S/LJ/RJ/ TDM<sup>1</sup>, MIL-STD-15531, ARINC4291, NEW SENT1, Parallel, Sequence

## Standard Analysis

Cursors: Waveform, V Bars, H Bars, V&H Bars, Split Measurements: 36 standard, along with Trend, Histogram and Spectrum Plots of measurement results.

Math: Basic Waveform Arithmetic, FFT, and Advanced

**Equation Editor** 

Search: Search on any trigger criteria

Jitter: TIE and Phase Noise

## Optional Arbitrary / Function Generator<sup>1</sup>

Arbitrary, Sine, Square, Pulse, Ramp, Triangle, DC Level, Gaussian, Lorentz, Exponential Rise/Fall, Sin(x)/x, Random Noise, Haversine, Cardiac

## Digital Voltmeter<sup>2</sup>

4-digit

## Trigger Frequency Counter<sup>2</sup>

8-digit

## Display

15.6-inch (385 mm) TFT color HD (1,920 x 1,080) resolution Capacitive (multi-touch) touchscreen

## Connectivity

USB Host (x7), USB Device, LAN (10/100/1000 Base-T Ethernet: LXI Compliant), Display Port. DVI-D, Video Out (NEW Security option locks ports)

## Optional Serial Bus Decode and Analysis<sup>1</sup>

I2C, SPI RS-232/422/485/UART USB 2.0 Ethernet I2S, LJ, RJ, TDM CAN, CAN FD, LIN, FlexRay, MIL-STD-1553,

## Optional Analysis1

ARINC429, NEW SENT

Advanced Jitter and Eye Diagram Analysis, **NEW** Automated Compliance Testing for Automotive Ethernet, NEW Automated Power Measurement and Analysis



Visit us at TEK.COM/5SERIESMSO or call 1-800-833-9200 for more information.

<sup>&</sup>lt;sup>1</sup> Optional and Upgradeable

<sup>&</sup>lt;sup>2</sup> Free with product registration