



# This changes everything.

Introducing the 5 Series MSO.

The largest display. The most channels.

The greatest experience.



15.6"  
HD display



Pinch-swipe-zoom  
touchscreen



4, 6, or 8  
FlexChannel® inputs



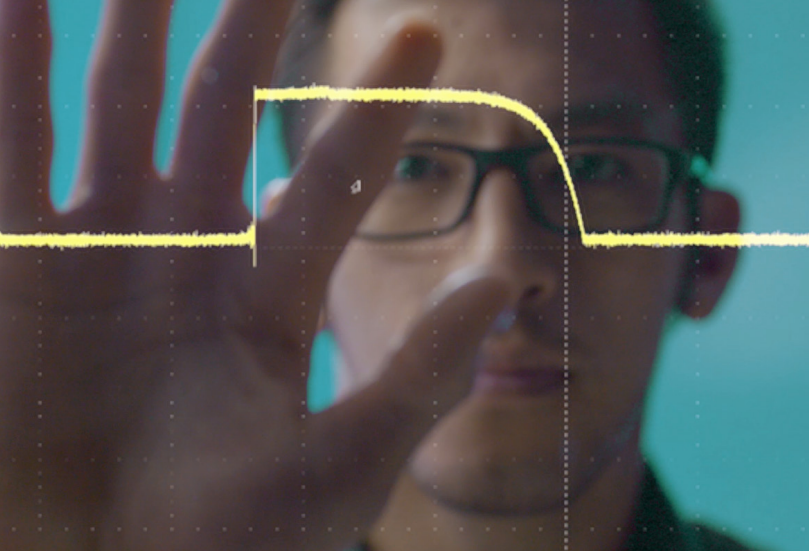
12-bit analog to  
digital converters



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 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, Ethernet, CAN, LIN, and many others

### Advanced Jitter Analysis

Comprehensive jitter decomposition and eye-diagram analysis

## Don't run out of channels.

Available with 4, 6, or 8 FlexChannel<sup>®</sup> 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



1 high-resolution analog input

8 digital logic inputs per channel

# NEW

- FastFrame™ segmented memory
- Automated power measurements
- Enhanced automotive bus decode/trigger
- Automotive Ethernet compliance
- Aerospace bus decode/trigger

## 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 ADC and new High Res mode offer up to 16-bit vertical resolution

Built in Arbitrary/Function Generator option

## FlexChannel inputs

- 1 analog or 8 digital signals each

## Available bandwidth (upgradeable)

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

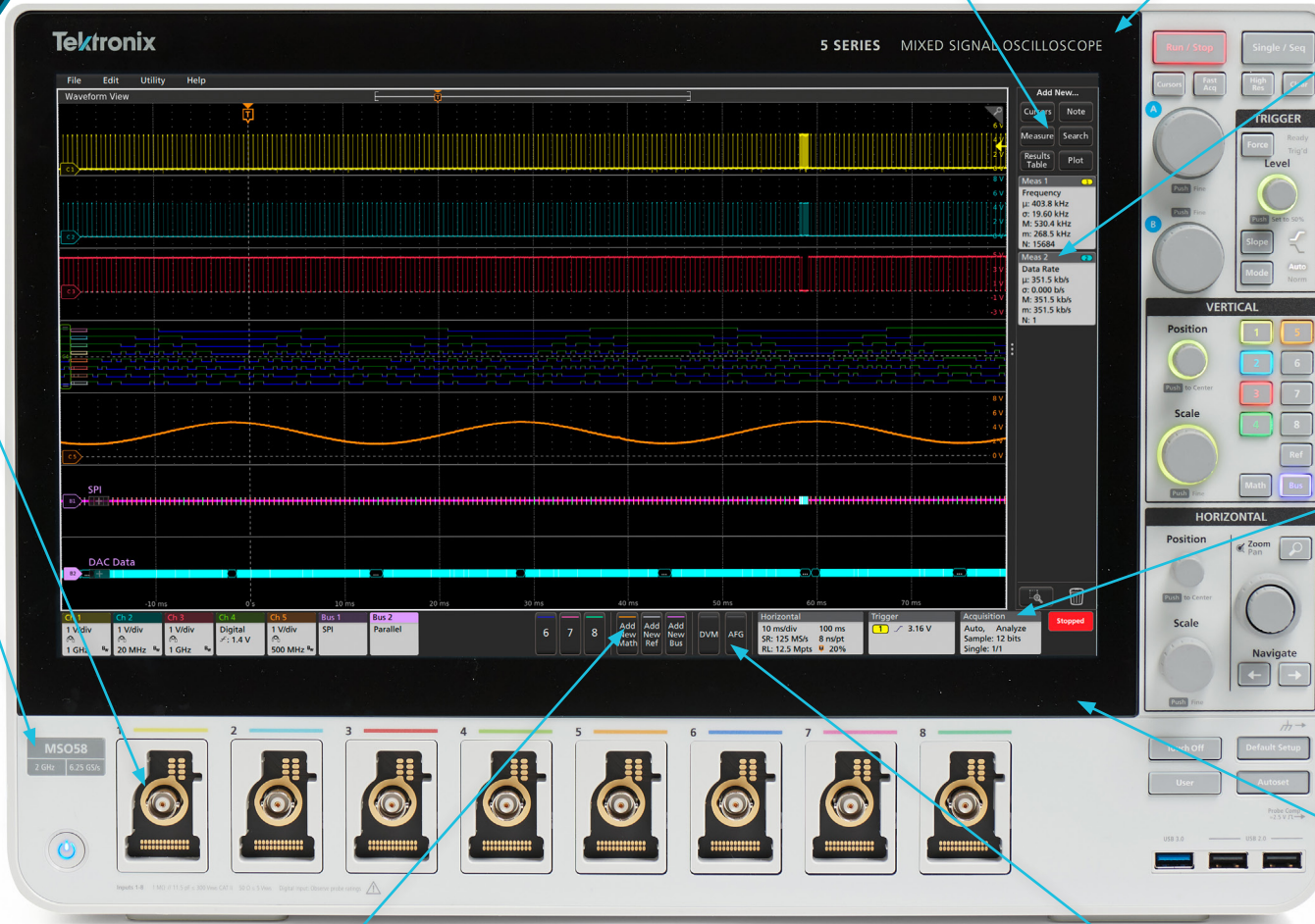
## Protocol options

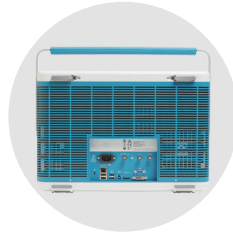
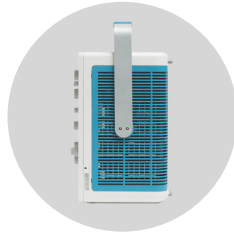
Serial bus trigger and analysis

- I<sup>2</sup>C/SPI
- RS-232/UART
- CAN, CAN FD/LIN/FlexRay
- USB 2.0
- Ethernet
- Audio
- **NEW!** Aerospace

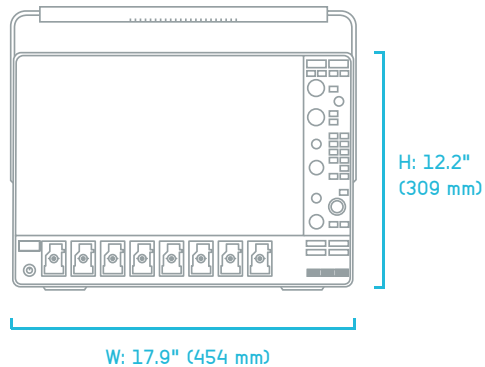
When removable SSD w/ Windows license is:

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

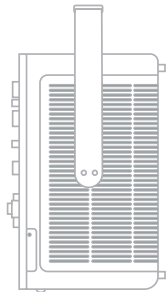




## Strength in numbers.



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 MSO58-LP.

### Input Channels

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

### Bandwidth<sup>1</sup>

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, I<sup>2</sup>C<sup>1</sup>, SPI<sup>1</sup>, USB<sup>1</sup>, Ethernet<sup>1</sup>, CAN<sup>1</sup>, **NEW CAN FD<sup>1</sup>**, LIN<sup>1</sup>, FlexRay<sup>1</sup>, RS-232/422/485/UART<sup>1</sup>, I<sup>2</sup>S/LJ/RJ/ TDM<sup>1</sup>, **NEW MIL-STD-1553<sup>1</sup>**, **NEW ARINC429<sup>1</sup>**, 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>

I<sup>2</sup>C, SPI  
RS-232/422/485/UART  
USB 2.0  
Ethernet  
I<sup>2</sup>S, LJ, RJ, TDM  
CAN, **NEW CAN FD**, LIN, FlexRay,  
**NEW MIL-STD-1553**, **NEW ARINC429**

### Optional Analysis<sup>1</sup>

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

<sup>1</sup> Optional and Upgradeable

<sup>2</sup> Free with product registration

Visit us at [TEK.COM/5SERIESMSO](http://TEK.COM/5SERIESMSO) or call 1-800-833-9200 for more information.

