

## ***Scopes Offer Versatility, Ease of Use and Large Displays At Lower Cost***

[Tektronix](#) has introduced two new products to its portfolio with the launch of the 3 Series MDO and 4 Series MSO, delivering versatile and easy-to-use oscilloscopes. Built on the user experience first introduced in the 5 and 6 Series MSOs, the 3 Series MDO and 4 Series MSO feature a highly intuitive touchscreen user interface, the largest and highest resolution display in their class, according to the vendor, and a modern industrial design. Now with more options across an array of demanding applications, Tektronix' product portfolio delivers advanced measurement and analysis capabilities and provides a comprehensive range of performance options for engineers (see the figure).

"Tektronix is a company built for engineers, by engineers, and we continued that legacy when we developed our new scopes," said Chris Witt, vice president and general manager, Time Domain Business Unit at Tektronix. "Our teams spent 100s of hours meeting with engineers around the world, testing and prototyping new features and designs, and we're excited to bring the very best oscilloscopes to market—built around insight from everyday engineers."

Witt continued, "We made usability and versatility a top priority, so engineers can spend time on innovation and solving difficult problems and not trying to figure out how to use their scopes." The 3 and 4 Series interface design with touchscreens and front panels keep key controls close at hand so instead of digging through multiple menus to find settings, engineers can simply double-tap the appropriate readout or measurement on the display.

The 4 Series MSO features a 13.3-in. display with 1920 x 1080 HD resolution, the largest and highest resolution in its class, according to Tektronix. It offers bandwidths up to 1.5 GHz and uses 12-bit ADCs for the highest vertical resolution in its class as well, says the company. Moreover, the company asserts that this is the first scope in this class to offer six input channels. With its innovative FlexChannel technology, any input channel can be converted from an analog to eight digital channels simply by connecting a logic probe.

To meet a diverse range of application requirements, the 4 Series MSO is available with bandwidths starting at 200 MHz and is well supported with options including serial decode and analysis, an arbitrary/function generator and a DVM/frequency counter. The new Spectrum View feature offers time correlated frequency domain analysis with independent spectrum controls. A power analysis package is available to automate ac line, switching device, ripple and sequencing measurements.

Bandwidth and options are all field upgradeable. All models deliver a 6.25-GS/s sample rate on all analog and digital channels. Standard record length is 31.25 Mpoints with an option for 62.5 Mpoints.

The 3 Series MDO features a sleek industrial design and what's described as the largest display in its class at 11.6-in. with full high-definition resolution. It uses the same intuitive user interface as the rest of the portfolio with a similar set of knobs and buttons but takes up less than 6 inches of depth on a bench.

The 3 Series MDO is more than an oscilloscope and can cover a wide range of debugging and validation tasks. It offers a built-in spectrum analyzer up to 3 GHz, with a separate RF input and specifications comparable to a standalone analyzer. This enables engineers to quickly debug wireless components in their designs or quickly track down sources of unwanted EMI emissions without having to use another instrument.

Sixteen digital input channels are available for mixed-signal analysis. Comprehensive serial protocol debugging and triggering options, optional power measurement and an optional AFG offer a high level of versatility. A DVM/frequency counter is included for free with product registration.

The 3 Series MDO is available in bandwidths starting at 100 MHz and extending to 1 GHz. Models are available with 2.5-GS/s or 5-GS/s sample rates on all analog and up to 8.25 GS/s on digital channels with 121.2-ps timing resolution. Standard record length is 10 Mpoints. For investment protection, bandwidths and options are fully upgradeable.

The distance between the front of the oscilloscope to the device under test are critical to gaining insight into troublesome circuits. Both the 3 Series MDO and 4 Series MSO use the TekVPI probe interface, giving access to the full range of Tektronix differential voltage probes, active voltage probes and current probes, plus the recently-introduced power rail probes and optically-isolated differential probes.

The 3 Series MDO is priced from \$3,850 and the 4 Series MSO is priced from \$7,550. This includes a standard three-year warranty and passive probes. For more information go to [Tek.com](http://Tek.com) or [Tek.com/oscilloscope](http://Tek.com/oscilloscope).



*Figure. Offering many of the benefits of the previously introduced 5 and 6 Series scopes at lower price points, the new 3 Series MDO and 4 Series MSO oscilloscopes are built for everyday use by a wide range of engineers. These instruments feature a highly intuitive touchscreen user interface, the largest and highest resolution display in their class, according to the vendor, and a modern industrial design.*