

High Performance Digitizers

Precision and performance on every channel, always

The 6 Series Low Profile Digitizer offers precision and density when monitoring target test points. It doesn't interleave sample rate, bandwidth, or record length so you never have to give up performance as you use more channels. This means you're getting the industry's fastest and highest-performing digitizer on all channels, always.



Next-Generation Machine Diagnostics

Research fields requiring single-shot events or fast, repetitive monitoring in their research labs, like Photo Doppler Velocimetry (PDV), VISAR, gas guns, spectroscopy and accelerators, need reliable, high-performance equipment for long-term success. These types of diagnostic experiments need to validate doppler shifts, phase alignments, beat frequencies and beam steering alignment and changes in amplitudes. Tektronix new digitizers and oscilloscopes provide improvements in precision, accuracy, performance and density when monitoring target test points.

The **6 Series Low Profile Digitizer** exceeds customer expectations by bringing an award-winning user interface, industry-leading performance, small form factor, easy remote accessibility and the level of reliability that comes with all Tektronix products. The **5 Series MSO Low Profile** provides more than 6X the channel density of a traditional bench oscilloscope while providing a very competitive cost per channel.



High-Bandwidth Manufacturing such as 5G and UWB

Higher data throughput is driving multiple technologies such as 5G mmWave, ultra-wideband, WiGig and automotive RADAR. The 6 Series Low Profile Digitizer is an ideal IF digitizer for multichannel systems and packs four high-performance 25 GS/s channels into a 2U rack. By using the DDC, there's up to 30% reduction in data sizes, which means you get your data faster for post processing.

HIGHLIGHTS:

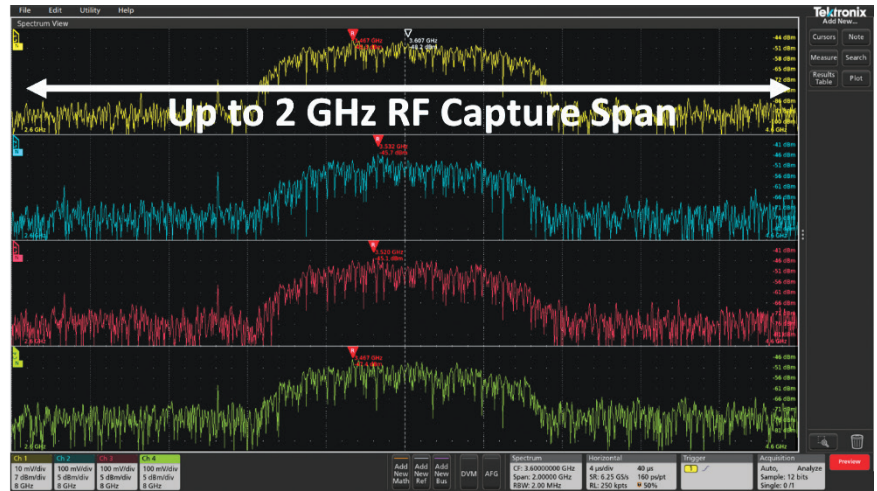
- 2 rack units high (3.5 inches) with rack mount attached
- Easy remote control – browser access and control
- Ethernet and USB 3.0 ports for fast data transfer
- Self-Calibration (SPC) without removing cables or signals for improved accuracy
- Programming support: IVI-C, IVI-COM, MATLAB, LabVIEW, Python, VISA, Sockets, and more

Built-in Spectrum View Inputs with DDC & IQ Data Offload

Whether you're a spectrum analyzer expert or an occasional user, you'll be able to put the built-in Spectrum View right to work. The Tektronix TEK049 ASIC has patented dual signal paths with an ADC and DDC that allow independent controls of both time domain and frequency domain.

HIGHLIGHTS:

- Up to 2 GHz bandwidth with Digital Down Converter (DDC)
- Individual time domain and frequency domain controls
- Frequency versus time, phase versus time analysis and magnitude versus time
- Fast I&Q data offloading



Specifications	Tektronix 6 Series Low Profile	Tektronix 5 Series Low Profile
Bandwidth (on all channels)	1 GHz to 8 GHz	1 GHz
Analog/Spectrum Channels	4	8
Sample Rate (on all channels)	25 GS/s	6.25 GS/s
ADC Resolution	12 bits	12 bits
ENOB	8.2 bits at 1 GHz 7.6 bits at 2.5 GHz 7.25 bits at 4 GHz 6.8 bits at 6 GHz 6.5 bits at 8 GHz	7.6 bits at 1 GHz
Noise at 1mV/div @ 1 GHz	55 μ V	254 μ V
RF Capture Bandwidth (span)	2 GHz	500 MHz
Security Option	Yes	Yes
Standard Record Length (on all channels)	125 Mpts	125 Mpts
Optional Record Length (on all channels)	1 Gpts	500 Mpts
Programmable Interface	Python, Visa, IVI, Sockets, LXI, MATLAB, LabVIEW	Python, Visa, IVI, Sockets, MATLAB, LabVIEW
Easy Remote Control via IP address	Yes from browser	Yes from browser
Field Upgradable Bandwidth	Yes	No
Operating System	Closed Embedded Linux (std.) Microsoft Windows 10 (opt. 6-WINM2)	Closed Embedded Linux

[Tek.com/high-speed-digitizer](https://www.tek.com/high-speed-digitizer)

