

EON 12-Bit 500 MHz Bandwidth RF Signal Recording Systems

The EON series of 12-bit RF signal recording systems are complete with integrated receivers, digitizers, computer, storage, and programming-free spectrum analyzer software. These turn-key solutions provide customers with a very powerful and flexible signal recording system, while minimizing the risks of self-integrated systems.

GaGe wideband receivers feature up to 8 selectable IF bandwidths, from 1 MHz to 500 MHz. The RF signal tuning covers 500 MHz to 26.5 GHz to provide unparalleled real-time signal recording and analysis capability ideally suited for use with the EON digitizer's 12-bit resolution and 3 GS/s sample rate.

The 2 channel EON Express model can support 1 receiver with wideband mode (500 MHz BW) and narrower band modes (80/40/30/20/10/5/1 MHz). 10 MHz reference inputs and outputs on both the digitizers and receivers provide a single frequency reference for synchronized system performance.

The spectrum analyzer software, SpectraScopeRT, requires no programming and allows for control of receiver center frequency, bandwidth, and signal recordings. SpectraScopeRT features real-time FFT power spectrums (with peak hold and persistence), spectrograms, histograms, and time domain displays while recording, and upon recording playback.

SpectraScopeRT also supports dual receiver, double bandwidth operation for both real-time display and gap-free recording. This allows 2 downconverters feeding a single digitizer to display and record parallel side by side bandwidths, effectively doubling the available bandwidth, up to 1 GHz.

The digitizers and receivers have full control and data acquisition support via Mathworks MATLAB, with example programs furnished to facilitate rapid signal processing and modulation analysis program development. Additional SDKs and example programs are provided for C/C# and LabVIEW.



<p>Starting at \$125,960 Includes: Receiver, Digitizer, Software, 1U Signal Recorder</p>	<p>Starting at \$201,205 Includes: 2 Receivers, 2 Digitizers, Software, 1U Signal Recorder</p>	<p>Starting at \$267,905 Includes: 2 Receivers, 2 Digitizers, Software, 4U Signal Recorder</p>
1 RF Input up to 26.5 GHz	2 RF Inputs up to 26.5 GHz	2 RF Inputs up to 26.5 GHz
<p>Receiver Bandwidths:</p> <ul style="list-style-type: none"> • 500 MHz at 1 GHz IF • 80 MHz at 160 MHz or 140 MHz IF • 40 MHz at 70 MHz IF • 30 MHz at 70 MHz IF • 20 MHz at 70 MHz IF • 10 MHz at 70 MHz IF • 5 MHz at 70 MHz IF • 1 MHz at 70 MHz IF 	<p>Receiver Bandwidths:</p> <ul style="list-style-type: none"> • 500 MHz at 1 GHz IF • 80 MHz at 160 MHz or 140 MHz IF • 40 MHz at 70 MHz IF • 30 MHz at 70 MHz IF • 20 MHz at 70 MHz IF • 10 MHz at 70 MHz IF • 5 MHz at 70 MHz IF • 1 MHz at 70 MHz IF 	<p>Receiver Bandwidths:</p> <ul style="list-style-type: none"> • 500 MHz at 1 GHz IF • 80 MHz at 160 MHz or 140 MHz IF • 40 MHz at 70 MHz IF • 30 MHz at 70 MHz IF • 20 MHz at 70 MHz IF • 10 MHz at 70 MHz IF • 5 MHz at 70 MHz IF • 1 MHz at 70 MHz IF
<p>1 Digitizer:</p> <ul style="list-style-type: none"> • 12-Bit A/D • 2 Channels • Up to 3 GS/s per CH • 1.75 GHz CH Input BW 	<p>2 Digitizers:</p> <ul style="list-style-type: none"> • 12-Bit A/D • 4 Channels • Up to 3 GS/s per CH • 1.75 GHz CH Input BW 	<p>2 Digitizers:</p> <ul style="list-style-type: none"> • 12-Bit A/D • 4 Channels • Up to 3 GS/s per CH • 1.75 GHz CH Input BW
<p>1U Signal Recorder:</p> <ul style="list-style-type: none"> • 18 TB SSD Storage • Up to 2 x 22-Core Xeon CPUs • Up to 512 GB RAM 	<p>1U Signal Recorder:</p> <ul style="list-style-type: none"> • 18 TB SSD Storage • Up to 2 x 22-Core Xeon CPUs • Up to 512 GB RAM 	<p>4U Signal Recorder:</p> <ul style="list-style-type: none"> • Up to 51 TB SSD Storage • Up to 2 x 22-Core Xeon CPUs • Up to 512 GB RAM

Additional options and configurations are available. Rackmount systems are shown above with optional shock rack transport case and optional 1U rack display.