

12 Bit, 2 Channels 3 GS/s PCI Express Gen-3 Digitizer up to 8 GB Memory

Order-No: ENE-123-G20 Series/Model: EON Express / CompuScope 123G2



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12 Bit, 2 x 3 GS/s PCIe Gen-3 Digitizer / Oszilloscope b. 8GB Speicher

Main Product Features

- **2 x 3 GS/s max. Sampling Rate**
- 1.75 GHz Analog Input Bandwidth
- **12-Bits Vertical A/D Resolution**
- 4 GB or 8 GB Onboard Acquisition Sample Memory
- FPGA Based Applications for Real-Time DSP Functions
- **Dual Port Memory with Sustained PCIe (Gen-3) Data Streaming at 4 GB/s**
- Full-Featured Front-End with DC or AC Coupling and 50 Ω Inputs
- Software Control of Input Voltage Ranges
- Ease of Integration with External or Reference Clock In & Clock Out
- External Trigger In & Trigger Out
- Larger Synchronized Multi-Channel Systems in Master/Slave Mode
- Full Height $\frac{3}{4}$ Length PCI Express (PCIe) Generation 3.0 x8 Card
- Programming-Free Operation with GaGeScope PC Oscilloscope Software
- Software Development Kits Available for C/C#, LabVIEW and MATLAB
- Windows 8, Windows 7, and Linux Operating Systems Supported

The new ultra high-speed, high-resolution Gage digitizers series EON Express CompuScope offers sampling of 3 GS/s at two channels on a single slot PCI Express card and are available with various on-board memory depths from 2 GS to 8 GS

Possible transfer speeds in the PCIe slots:

PCI Express (PCIe) x8 (8 Lane) Gen-3 (Version 3.0): 4+ GB/s

PCI Express (PCIe) x8 (8 Lane) Gen-2 (Version 2.0): 3.1 GB/s

PCI Express (PCIe) x8 (8 Lane) Gen-1 (Version 1.0): 1.5 GB/s

PCI Express (PCIe) x4 (4 Lane) Gen-1 (Version 1.0): 1 GB/s

PCI Express (PCIe) x1 (1 Lane) Gen-1 (Version 1.0) 245 MS/s

Possible transfer speeds with Thunderbolt-3 Expansion:

[Gage Thunderbolt-3 version](#): (PCIe) x8 (8 Lane) Gen-3 (Version 3.0): 4+ GB/s

[OneStop Systems / Magma Expansion](#): PCIe) x8 (8 Lane) Gen-3 (Version 3.0): 4+ GB/s

Possible [eXpert On-Board Real-Time Application Options](#) (model-dependent):

- eXpert™ Daten Streaming Stream-to-Analysis
- eXpert DDC (Digital Down Conversion)
- eXpert™ Mittelwertbildung eXpert™
- eXpert FFT (Fast Fourier Transform)
- eXpert OCT (Optical Coherence Tomography)

Possible [Software Development Kits \(SDK's\)](#).

- CompuScope SDK für C/C# (WINDOWS 7/8/10 32Bit/64Bit und Linux)
- CompuScope SDK für MATLAB (WINDOWS 7/8/10 32 Bit/64Bit)
- CompuScope SDK für LabVIEW (WINDOWS 8/10 32Bit/64Bit)

[GageScope \(Oscilloscope-Software\)](#)

- GageScope: Lite Version
- GageScope: Standard Version
- GageScope: Professional Version

Combination possibilities with broadband Downconverter:

- [Broadband Downconverter solution from 100 kHz to 8 GHz](#)

- [Downconverter solution from 100 to 18 GHz](#)
- [Downconverter solution from 100 kHz to 8 GHz 100 kHz to 27 GHz](#)

Applications:

- RADAR Design and Test
- Signals Intelligence (SIGINT)
- Ultrasonic Non-Destructive Testing
- LIDAR Systems
- Communications
- Optical Coherence Tomography
- Spectroscopy
- High-Performance Imaging
- Time of Flight
- Life Sciences
- Particle Physics

Manufacturer page

<http://www.gage-applied.com/>

Data Sheet Download



[12 Bit PCIe Gen-3 Highspeed Digitizer with 6 GS/s Sampling rate \(2.4 MiB\)](#)



Opening the Download-Files May require the Adobe-Acrobat-Reader.

[Click here to download the Adobe-Acrobat-Reader.](#)

If you have questions please don't hesitate to contact us any time.

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