

16-Bit PCIe Gen-2 Digitizer 2 Channels 100 MS/s up to 8 GS Memory

**Order-No.: OSC-442-007 Series/Model: Oscar-16 Express / CompuScope
4427**



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4 Channels 14 Bit Digitizer / Oscilloscope for PCI Bus with 100 MS/s Sampling rate

Main Product Features

- **2 digitizing channels**
- **100 MS/s maximum sampling per channel**
- **14 bits vertical resolution**
- **2 GS to 16 GS on-board acquisition memory**
- **65 MHz bandwidth**
- **Full-size, single-slot PCI Express card**
- **Full-featured front-end, with software control over input ranges, coupling and impedances**
- **8-Lane PCI Express**
- **Ease of integration with External or Reference Clock In and Clock Out, External Trigger In and Trigger Out**
- **Programming-free operation with GageScope® oscilloscope software**
- **Software Development Kits available for LabVIEW, MATLAB, C/C# and Linux**
- **Custom FPGA firmware available**

The GaGe Oscar™ family of multi-channel digitizers features up to 4 channels in a single-slot PCI Express or PCI card with up to 100 MS/s sampling per channel, and up to 16 GS of on-board acquisition memory.

Combine several Oscar cards for up to 32 channels in a single system.

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



[PCIe Gen-2 100 MS/s 16 Bit 2-oder 4 Kanal Digitizerkarten \(661.1 KiB\)](#)



Für das Betrachten der Download-Dateien benötigen Sie i. R. den Adobe-Acrobat-Reader.
[Sie können diesen hier herunterladen.](#)

Wuntronic GmbH, Heppstrasse 30, D-80995 Munich, Germany
Phone +49 (89) 3133007, Fax +49 (89) 3146706, wuntronic@wuntronic.de