



We value our OEM customers and understand their needs to complete projects on time and within budget.

With our reliable, high-quality products and support, our OEM customers gain valuable time-to-market and save tens of thousands of development dollars.

Our knowledgeable support staff assists OEM customers through all product lifecycle stages from development to production. This OEM-friendly philosophy is why we have so many satisfied OEM customers around the world.

#### **APPLICATIONS**

- Medical Imaging Systems
- Ultrasonic Inspection Systems
- Laser Test Systems
- Electronic Component Testing
- Spectroscopy
- Optical Fiber Systems
- Hard Drive/Storage Media Testing

## **Gage OEM Program**

### **Strategic Partners Delivering High-Quality Solutions**



#### **Who are Gage OEM Partners**

Original Equipment Manufacturers (OEM) are customers who incorporate one or more of Gage's ultra-fast A/D or D/A cards into their end-product and resell the complete system to end-users.

#### **Why do OEMs use Gage Cards?**

##### **Technology**

Gage's proven leadership in ultra-fast A/D and D/A technology means that OEMs get the best product available on the market.

##### **Quality/Reliability**

All Gage products are thoroughly tested and calibrated before they are shipped to our customers with a certificate of traceable calibration. We know that OEMs need reliable products that won't fail in the field.

##### **Customization**

While Gage's products are designed to serve a great number of applications, we realize that some customers may need a modified version of our product. We can customize our products to meet your specific needs.

##### **Tech Support**

When OEMs use Gage products, they have direct support from our design engineers. We will work closely with you to ensure your project's success.

## CUSTOMER

Manufacturer of temperature measurement systems using backscatter of laser light in optical fiber

## INDUSTRY

Mining

## CUSTOMER REQUIREMENTS

- Digitizer is key component of temperature measurement system
- Simultaneous high speed digitization of two photodiode signals
- High digitizer vertical resolution for small backscatter features
- Fast repetitive signal averaging for improvement of noisy photodiode signals

## GAGE'S SOLUTION

CompuScope 14200-32M – Gage's 14-bit, 200 MS/s digitizer for the PCI bus

eXpert™ on-board signal averaging firmware option

Custom internal CS14200 connector modification

LabVIEW Software Development Kit

## KEY BENEFITS

- Simultaneous 200 MS/s sampling on two channels
- 14-bit vertical resolution for detection of high dynamic range photodiode signal
- Fast 200 MB/s PCI data transfer rate
- eXpert™ on-board signal averaging allows waveform averaging rates of over 200,000 waveforms per second
- Internal connectors eliminate external cabling and reduce emissions of electromagnetic radiation
- High performance

## OEM PRODUCT FOCUS

Gage designs and manufactures high-speed digitizers, analog signal generator cards, digital input and digital output cards, as well as programming-free GageScope® oscilloscope software and a vast array of powerful Software Development Kits (SDKs). Any of Gage's products are eligible for OEM volume discount pricing. Gage has created several products specifically to meet our OEM customers' unique requirements for:

- Hardware or software customization
- Personalized product and technical support
- Volume discount pricing
- Joint marketing opportunities
- Early access to new software releases

## COMPUSCOPE 14200

The CompuScope 14200 14-bit digitizer for the PCI bus features 200 MS/s sampling on 2 synchronous channels and includes many new advanced features:

- 14 bit vertical resolution
- Up to 100 MHz bandwidth
- Full-size, single-slot PCI card
- Up to 2 GigaSamples (or 4 GBytes) of on-board acquisition memory
- Time-stamping of trigger events
- Advanced timing connections (Trigger Out, Clock Out, External Clock, 10 MHz reference clocking)
- 32 bit, 66 MHz PCI standard for 200 MB/s transfer to PC memory
- Advanced eXpert™ on-board FPGA firmware options for Signal Averaging, Finite Impulse Response (FIR) Filtering and Peak Detection
- Software Development Kits available for LabVIEW, MATLAB, C/C# and LabWindows/CVI



The CS14200 is ideal for OEM customers who require the ideal combination of high-speed and high-resolution.

## COMPUSCOPE 14201

The CompuScope 14201 is a 14-bit digitizer with 200 MS/s sampling on a single channel with features similar to that of the CS14200 but available at a reduced cost for volume orders. Basically, Gage has removed hardware components from the CS14200 to provide only a single channel and are able to directly pass the manufacturing cost savings directly to our OEM customers.

## COMPUSCOPE 1220

A CompuScope 1220 12 bit digitizer for the PCI bus can simultaneously sample two analog signals at speeds up to 20 MS/s with 12 bit resolution and store the data in the on-board memory.

- 12 bit, 20 MS/s A/D sampling on two simultaneous channels
- Single-ended inputs
- Up to 1 GigaSample of on-board acquisition memory
- Fast data transfer rate to PC memory
- Enhanced external clocking capability for timing synchronization over a wide range of frequencies
- Programming-free operation with GageScope® software
- Software Development Kits available for LabVIEW, MATLAB, C/C#, LabWindows/CVI



CompuScope 1220 uses state-of-the-art data conversion technology to provide dual-channel simultaneous sampling rate of 20 MS/s with 12 bit resolution. Each channel has its own ADC chip, eliminating the need for multiplexing the inputs which invariably results in increased noise and lower performance.

## COMPUSCOPE 12400

The CS12400 general-purpose digitizer features 12-bit vertical resolution and high sampling speed up to 400 MS/s.

- 400 MS/s sampling on one channel or 200 MS/s on 2 synchronous channels
- 12 bits nominal resolution
- 200 MHz bandwidth
- Full-size, single-slot PCI card
- Up to 2 Gigasamples of on-board acquisition memory
- Full-featured, software-controlled front-end
- 32 bits, 66 MHz PCI standard for 200 MB/s transfer to PC memory
- Compatible with GageScope oscilloscope software
- Software Development Kits available for LabVIEW, MATLAB, C/C#, LabWindows/CVI



## CUSTOMER

Manufacturer of time-resolved infrared spectrophotometer systems

## INDUSTRY

Biological / Chemical Analysis

## CUSTOMER REQUIREMENTS

- Digitizer is key component of spectrophotometer system
- Two acquisition channels required
- High resolution required for high dynamic range spectra signals
- Synchronous digitizer with external clocking from 10 kHz to 5 MHz required
- Acquisition of two synchronous digital input bits required per channel
- Fast repetitive capture for rapid spectra throughput and time resolution on spectral evolution
- High DC accuracy for uniformity of system calibration

## GAGE'S SOLUTION

CompuScope 1220-1M – Gage's 12-bit, 20 MS/s digitizer for the PCI bus

Custom modification for acquisition of two digital input bits per channel

C/C# Software Development Kit

## KEY BENEFITS

- Simultaneous 12-bit sampling on two channels
- Wide external clock frequency range on (1 kHz to 20 MHz)
- Fast 50 MB/s PCI data transfer for repetitive capture rates of over 2000 waveforms/second
- Automated NIST traceable calibration verification of all CS1220s before shipment guarantees 0.5% input accuracy
- Customer driver and C sample program provided for easy management of digital input bits
- Low cost



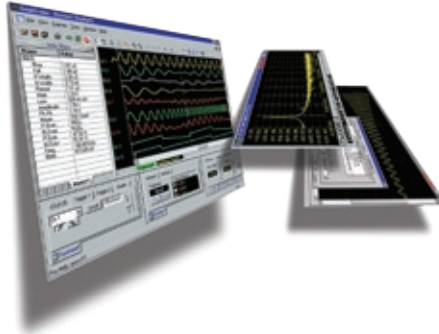
## SOFTWARE SUPPORT

**Gage's powerful and easy-to-use SDKs** allow rapid integration of Gage hardware into custom software applications under C/C#, MATLAB, LabVIEW, LabWindows/CVI, and other programming environments. For OEM customers, we can provide specific application examples and customized SDKs to ensure harmonious operation of CompuScope hardware with other instruments.

### **GageScope oscilloscope**

**software** is also available to provide programming-free operation. With an easy-to-use Windows-based user interface, GageScope allows complete control of CompuScope cards for analog signal capture. Data can be displayed, analyzed, printed and saved all from within the same operating environment. We

can provide our OEM customers with customized GageScope functionality or a modified user interface that suits specific application requirements.



## CUSTOM HARDWARE AND SOFTWARE MODIFICATIONS

For OEM customers, we build upon our catalog products to customize them for your specific needs. For instance, we can provide:

- Access to normally inaccessible timing signals
- Custom signal conditioning
- Customized eXpert™ firmware images for signal processing
- Firmware and driver source code for user specific modifications
- Custom driver and firmware development for improved hardware performance and/or functionality
- Maintenance of specific driver versions and seamless driver upgrades
- Enhanced GageScope functionality including specific user interface modifications
- Specific application examples and customized SDKs

## ABOUT GAGE APPLIED TECHNOLOGIES

Gage Applied Technologies, a member of the Dynamic Signals group of companies (DynamicSignals.com), is a worldwide industry leader in high-performance signal capture. Gage, KineticSystems, Preston Scientific and Cyber Systems, all members of the Dynamic Signals growing family, serve a wide-range of industries by providing instruments and modules for PC-based test & measurement systems and synthetic instrumentation built on the PCI, CompactPCI/PXI, VXI, CAMAC and proprietary platforms. Gage's PC-based test & measurement products include: high-performance digitizers, signal generators, digital input cards, and digital output cards.

All specifications subject to change without notice.

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## CUSTOMER

Manufacturer of medical dispensing systems

## INDUSTRY

Medical

## CUSTOMER REQUIREMENTS

- Digitizer is key component of medical dispensing systems
- Two channels required at 400 MS/s
- Digitizer must be flexible in order to probe variety of signals at multiple test points
- Key acquisition sequence requires rapid repetitive capture of 8 MegaSamples of data
- C interface required for manufactured system and MATLAB support required for prototyping

## GAGE'S SOLUTION

CompuScope 12400-32M – Gage's two channel 12-bit, 400 MS/s digitizer for the PCI bus

C/C# and MATLAB Software Development Kit

## KEY BENEFITS

- Software selectable, flexible signal conditioning
- Powerful Multiple Record mode allows autonomous stacking of repetitive waveforms in on-board memory with sub-microsecond re-arm time between acquisitions
- Powerful C and MATLAB SDKs with code examples for different operation modes.
- Low cost