KineticSystems' products and systems are used worldwide, in numerous fields ranging from R&D to manufacturing test and ATE systems, to perform cutting-edge research, to test jet engines, to monitor automobile crash tests, to develop advanced radar systems, to enhance performance in missiles, and to assist in a wide variety of other applications.

Our innovative SoftView™ soft front panel application provides immediate access to all of our cPCI/PXI hardware features through a simple point-and-click graphical user interface — no programming required.

**APPLICATIONS**

IC Testing  
Machine Automation  
Data Recording  
Manufacturing Test  
Wireless Communications  
In-Vehicle Control & Testing  
Low to High-Speed Measurement  
High-Channel Count Systems  
Radar/Sonar Systems  
Medical Testing

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**KineticSystems cPCI/PXI Product Overview**

Comprehensive suite of Instrumentation and Software tools to enable rapid development and deployment of flexible Test and Measurement systems.

KineticSystems supplies systems ranging from a few channels tethered to a computer to thousands of channels remotely distributed through Local Area Network (LAN) connections. Whether the systems are fixed purpose for specific testing or require flexibility for handling multirole data acquisition, we provide the tools and systems necessary for expedient implementation.

Each KineticSystems’ instrument is delivered with a full set of VISA compliant Plug and Play (PNP) drivers to easily integrate into a new or existing PXI/cPCI installation. The software distribution also includes a complete set of example code in C, LabWindows™/CVI and LabVIEW to illustrate the program flow required to utilize the instruments. These examples can be used as the foundation to build a specific application or used as-is for instrument diagnostics.

KineticSystems’ soft front panel application SoftView™ is included with each instrument which integrates KineticSystems’ entire line of PXI/cPCI instruments into a single software utility. With this package you can evaluate all instrument functionality, coordinate multi-instrument synchronization, store configurations, record data directly to disk and retrieve acquired data... all without writing any code! SoftView™ contains a full featured “Help” system that links the instruments’ configurable parameters to the function call documentation for simple cross referencing.

Let the KineticSystems data acquisition and control experts assist you in your next system challenge. We can supply complete solutions for ATE, data acquisition, local and remote digital recording, stimulus-response, environmental monitoring and process control applications to name a few. Or, develop your own application with the richly featured programming libraries and starter examples.
**P635: 8-Ch 100 kHz 3U Frequency Counter**

The P635 is a single-width, 3U, PXI bus module with eight frequency measurement channels. This counter module can be used to monitor a variety of pulse sources. Moreover, its unique circuitry allows the monitoring of a wide range of frequencies without changing any module settings.

For more information, go to: 
www.kscorp.com/Products/P635

**P635 FEATURES**

- Contains eight frequency counter channels
- Frequency range from 0.06 Hz to 100 kHz
- Differential and TTL input provided
- Differential input range ±20 mV to ±20 V
- Precision time base (±1 ppm, 10 deg. C to 50 deg. C)

**P580: 34-Ch 3U Relay Multiplexer**

The P580 is a double width 3U PXI module that functions as a multiplexer. The P580 incorporates two independent differential analog paths that can be connected to any of 34 differential signal paths through the 68-position front panel mounted SCSI connector.

For more information, go to: 
www.kscorp.com/Products/P580

**P580 FEATURES**

- 34 differential input channels that can be multiplexed onto two independent analog paths
- 4 front panel LEMO connectors which can be configured as inputs or outputs
- Controls switching sequence via plug-and-play drivers or scanner memory

**Family of 3U Multi-Function Modules**

The P216, P210, P206, and P205 provide 4 analog input channels for simultaneous-sampling to meet a wide range of application requirements.

The P224, P225, and P226 are high-density, high-performance multifunction PXI modules that provide up to 64 analog input channels with various gain settings and scan sequences.

All of the above multi-function modules also feature analog and digital triggering, 2-ch 12-bit analog outputs with waveform generation capabilities, 24-ch programmable digital I/O lines, and 2-ch 16-bit general-purpose timers/counters, and differential input configurations to achieve maximum noise elimination.

The P251 and P252 are high-speed, high-performance, analog output multifunction PXI modules. These devices are able to update up to 8 analog output channels simultaneously with 12-bit resolution sustaining 1 MS/s. Hardware-based arbitrary waveform generation also included.

For more information, go to: 
www.kscorp.com/Products/pxi/multi_function

**P210/216/205/206 FEATURES**

- 4 differential analog input channels
- Up to 2 MS/s simultaneous-sampling rate (P210)
- 14-bit A/D resolution (P210)
- 16-bit A/D resolution (P205, P206 & P216)
- On-board 8k-sample A/D FIFO (P210)

**P224/225/226 FEATURES**

- 64 single or 32 differential analog input channels
- Up to 3 MS/s sampling rate (P224)
- 12-bit A/D resolution (P224)
- 16-bit A/D resolution (P225 and P226)
- On-board 1k-sample A/D FIFO

**P251/252 FEATURES**

- 4 multiplying analog output channels (P251)
- 8 multiplying analog output channels (P252)
- 12-bit D/A resolution
- Up to 1MS/s simultaneous-update rate
- On-board 8k-sample D/A FIFO (P251)
- 4 (P252) or 8 (P251) single-ended inputs to a 14-bit 400 KS/S ADC
**CP266 FEATURES**
- 32 or 64 independent analog output channels
- 16-bit resolution
- ±10 V full-scale output
- Low drift
- Single gain and offset adjustments
- 2-pole, Bessel output filter on each channel
- Power-on reset to zero volts

**CP266: Single-width, 6U Analog Output Module**
The CP266 is a single-width, 6U, CompactPCI module with 32 or 64, 16-bit analog output channels. These independent analog channels provide ±10 V full-scale outputs. The channel update rate is 2 ms, and each output is accurate to ±1 mV.

For more information, go to: www.kscorp.com/Products/CP266

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**CP387 FEATURES**
- 256 channel digital input/output channels
- 128 base card channels
- 4 mezzanine card sites for added I/O capability
- Change of state recognition
- Pattern recognition
- Input and output strobes
- Programmable contact-bounce suppression on inputs

**CP387: Single-width, 6U Digital I/O Module**
The CP387 is a single-width, 6U, CompactPCI module with up to 256 digital input/output channels. The CP387 base board supports 128 channels of TTL I/O. Four mezzanine card sites can be populated with other forms of digital I/O including isolated input, isolated output, relay output, AC switch output or differential I/O.

For more information, go to: www.kscorp.com/Products/CP387

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**CP213 FEATURES**
- 32, 64 or 128 channels of analog input
- 16 multi-function digital I/O (TTL) channels
- 16-bit resolution
- Programmable gain per channel
- Programmable scan rates of <1 S/s through 100 kS/s
- Optional 10 Hz to 1 kHz low pass filters
- Precision on-board reference for end-to-end calibration

**CP213: 32/64/128-Ch, 16-bit 6U ADC**
The CP213 is a single-width, 6U, CompactPCI/PXI module with either 32 or 64 differential analog input channels that can alternately be configured under software control as 64 or 128 single-ended analog input channels. A 16-bit ADC scans each channel at a scan rate chosen by the user. The number of channels scanned and scan rate are software selectable.

For more information, go to: www.kscorp.com/Products/CP213

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**CP246/CP248 FEATURES**
- Single slot solution for bridge conditioning and ADC
- 16-bit 250 KS/s ADC per channel
- Differential Inputs, 8 channels on CP246 and 4 300V isolated channels on CP248
- Bridge Completion for 1, 2, or 4 active arms
- 16 multi-function digital I/O channels (CP246)
- Programmable shunt calibration, gain and excitation per channel

**CP246: 8-Ch 6U Bridge Conditioner with 16-bit ADC**
The CP246 and CP248 are single-width, 6U, PXI/cPCI modules with each channel of bridge conditioning feeding an independent 16-bit ADC (Analog to Digital Converter). The CP246 has 8 differential channels and the CP248 has 4 isolated channels at 300 volts. These single-width solutions incorporate both signal conditioning and ADC to eliminate the need for complex field wiring. Also included with each CP246 are 16 multi-function digital I/O channels.

For more information, go to: www.kscorp.com/Products/CP246 or www.kscorp.com/Products/CP248

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www.kscorp.com
CompuScope 1610C: 16-bit 6U Waveform Digitizer

CompuScope 1610C is a 6U form factor CompactPCI card that can simultaneously sample two analog signals at speeds up to 10 MS/s with 16 bit resolution and store the data in the on-board memory.

For more information, go to:
www.kscorp.com/Products/CS1610C

Rugged 3U/6U Chassis and Controllers

KineticSystems’ provides a variety of chassis with either embedded or remote interfaces to suit your needs: 7-slot 6U (IM8000C), 14-slot 3U/6U (CP199), or 20-slot 6U (CP195). Our chassis feature advanced laminate welded construction combined with lightweight materials to provide an extremely rigid structure optimized for shock resilience.

For more information, go to:
http://www.kscorp.com/Products/pxi/mainframe_chassis