ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *National Instruments 183286A-08* at our website: ***Click HERE***

Configurable Signal Conditioning Enclosure

NI CA-1000

- Versatile connector/enclosure system
- Houses signal conditioning and connector block accessories
- Wide variety of I/O connectivity and panelette options
- Holds maximum of 18 connectivity/interface panelettes
- Low-profile enclosure
- Rack-mount and stacking kits available

I/O Connectivity Options

- BNC
- Thermocouple
- Banana jack
- LEMO connector (B-Series)
- MIL-spec
- SMB
- 9-pin D-Sub
- Strain relief

Interface Panelettes

- Momentary pushbutton
- Potentiometer
- Toggle switch
- Rocker switch
- LED



Overview

The National Instruments CA-1000 is a configurable enclosure designed for maximum user-defined I/O connectivity and flexibility. It is a portable enclosure for laptop, desktop, and rack-mount applications. You can install many NI accessories in the NI CA-1000, such as the SC-204x signal conditioning products, and the SCB-68, CB-68LPR, and CB-50LP terminal blocks. The result is a compact, portable, flexible, and comprehensive signal conditioning/interconnection system. The CA-1000 also facilitates quick connection and disconnection with standard I/O connectors for easy system integration and reconfiguration. By adding interface panelettes, such as toggle switches, potentiometers, and LEDs, you can control and verify system operation locally.

CA-1000 Enclosure

The metal enclosure provides a low-profile, portable housing for signal conditioning and connector accessories. You can place the enclosure under a laptop PC, on a benchtop, or in a 19 in. rack. You can also stack two or more enclosures with the stacking kit. The CA-1000 enclosure includes five cable entry options, so you can place the 68-pin or 50-pin connector for the cable to your DAQ device on either the side or the rear of the CA-1000 enclosure. Please note that the CA-1000 is shipped without any panelettes, signal conditioning accessories, connector blocks, or cables. These components must be ordered separately.

Internal Accessories

The CA-1000 houses a variety of signal conditioning and data acquisition accessories, including the SC-204x, SCB-68, CB-68LPR, and CB-50LP. You mount these accessories using hardware in the bottom panel of the CA-1000 enclosure. To install the SCB-68 in the CA-1000, you must first remove it from its own metal enclosure.

I/O Panelettes

The CA-1000 includes a user-configurable signal connection scheme. This connectivity flexibility is achieved with interchangeable panelettes. The panelettes, which come with standard signal connectors – for example, BNC, SMB, banana jack, thermocouple plugs, and LEMO, MIL-Spec, and 9-pin D-Sub connectors – mount in the front of the CA-1000 enclosure. The CA-1000 front panel offers nine panelette slots. The rear panel can also be removed offering nine more panelette slots. However, this option is not available if you are using the SCB-68 inside the CA-1000. You can mix and match different types of panelettes. Each panelette (except for the strain-relief panel) includes lead wires that you connect to the screw terminals of the accessory mounted inside the CA-1000. You can therefore connect the panelettes to any I/O signal available on the accessory.

NATIONAL INSTRUMENTS™

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Configurable Signal Conditioning Enclosure

Interface Panelettes

National Instruments also offers interface panelettes, which expand the functionality of the CA-1000. Interface panelettes include traditional interface controls and displays, such as rocker switches, toggle switches, momentary switches, potentiometers, and LEDs. Using interface panelettes, which are mounted alongside I/O panelettes, you can change hardware inputs, trigger events, or verify operational status. Each interface panelette includes lead wires for connection to the screw terminals of the accessory mounted inside the CA-1000.

Cabling

The cabling needed to connect the CA-1000 to the measurement device depends on the accessories installed in the CA-1000 and the measurement device used. Some accessories installed in the CA-1000 require internal cabling to connect the accessory to the CA-1000 wall. Use Table 1 to determine which cabling components you need, including the cable to your measurement device.

The CA-1000 also provides the flexibility of five external interconnection locations, giving convenient cabling for laptop applications by aligning the I/O connector with the location of the PCMCIA slots on laptop computers. With the five external interconnection locations, you can also customize desktop and rack-mount applications for added convenience.

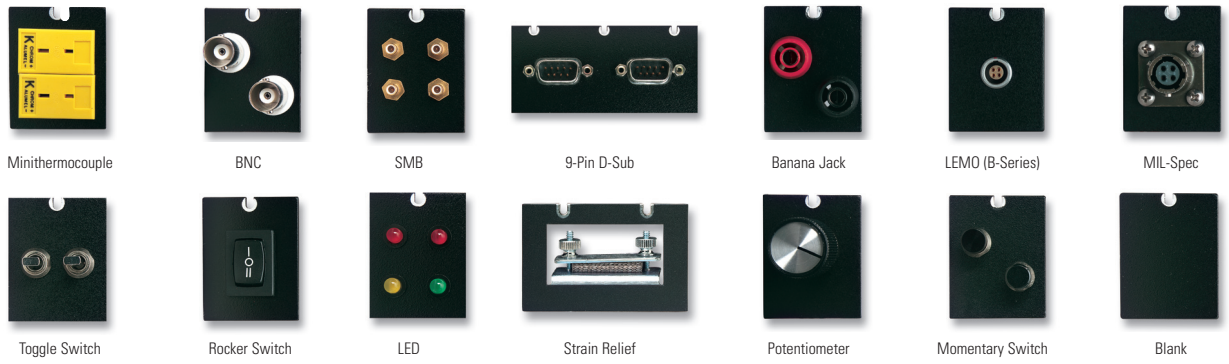


Figure 1. CA-100 Panelettes Options

Device	SC-204x Series	Connector Blocks	
		CB-50LP	CB-68LPR or SCB-68
68-pin E Series DAQ Devices (except DAQCards)	R68M-50F and SH68-68-EP[1]	N/A	SH68-68-EP[1]
100-pin E Series DAQ Devices[3]	Applicable for one leg	N/A	SH1006868
Latching E Series DAQCards	R68M-50F and SHC68-68-EP	N/A	SHC68-68-EP
DAQCard-6062E, DAQCard-6024E	–	–	–
Nonlatching E Series DAQCards:	R68M-50F and PSHR68-68 shielded cable kit [2]	N/A	PSHR68-68 shielded cable kit[2]
DAQCard-AI-16E-4, DAQCard-AI-16XE-50			
68-pin digital I/O and counter/timer devices (except DAQCards)	N/A	N/A	SH68-68-D1
PCI-DIO-32HS, PXI-6533, AT-DIO-32HS,	–	–	–
NI 6534, NI 660x	–	–	–
Nonlatching 68-pin digital I/O DAQCards:	N/A	N/A	PSHR68-68-D1 shielded cable kit
DAQCard-6533	–	–	–
Simultaneous sampling multifunction DAQ devices	N/A	N/A	SH68-68-EP[1]
PCI-6503	N/A	R50M-50F and SH50-50	N/A
PC-DIO-24	–	–	–
DAQCard-DIO-24	N/A	R50M-50F and PSH27-50F-D[1]	N/A
NI 65273, PCI-DIO-963, PXI-65083, DAQPad-65083	N/A	Two R50M-50F and R1005050 [4]	N/A
PC-DIO-963	N/A	Two R50M-50F and NB5[4]	N/A

[1]You can also use the SH68-68R1-EP or R6868. [2]You can also use the PR68-68F. [3]You can use two CA-1000 enclosures with one of these devices. Please note: If you are using a NI 435x series data logger, please see Table 2 on page 358 for information on cabling to a CB-68T and CA-1000. [4]Splits into two 50-pin connectors. See page 368 for information on using the CA-1000 with analog output products.

Table 1. CA-1000 Cabling

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Configurable Signal Conditioning Enclosure

Ordering Information

NI CA-1000 777664-01
Dimensions – 30.7 by 25.4 by 4.3 cm (12.1 by 10.3 by 1.7 in.)

Panelettes

Minithermocouple, J-type (2 included) 184736-01
Minithermocouple, K-type (2 included) 184736-02
Minithermocouple, uncompensated (2 included) 184736-03
Thermocouple, J-type 187597-01
Thermocouple, K-type 187597-02
Thermocouple, uncompensated 187597-03
BNC (2 included) 184737-01
Banana jack (2 included) 186405-01
LEMO (B-Series)
2-pin, female 187585-01
4-pin, female 187585-02
6-pin, female 187585-03
MIL–C–26482 (Series 1)
MS 3112 E 8-2 S 187591-01
MS 3112 E 8-2 S 187591-02
MS 3112 E 8-4 S 187591-03
SMB (4 included) 185505-01
9-pin D-Sub
1 male 184738-01
2 male 184738-02
1 female 184738-03
2 female 184738-04
Strain relief (small) 184721-01
Blank 184483-01
Momentary push-button switches (2 included) 185380-01
Rocker switch (on/off/on) 185379-01
Toggle switches (on/off/on, 2 included) 185378-01
Potentiometer (10 kΩ, single-turn) 185377-01
LEDs (4 included-1 green, 1 red,
1 orange, 1 yellow) 185376-01

External Cables

SH68-68-EP, 1 m 184749-01
SH68-68-D1, 1 m 183432-01
SH68-68R1-EP, 1 m 187051-01
SH50-50, 1 m 777720-01
R6868, 1 m 182482-01
R1005050, 1 m 182762-01
NB5, 1 m 181304-10
SH1006868, 1 m 182849-01
PSHR68-68 shielded cable kit 777293-01
PSHR68-68-D1 shielded cable kit 777420-01
PR68-68F, 1 m 183646-01
PSH27-50F-D1, 1 m 776989-01
SHC68-68-EP, 1 m 186838-01

Internal Cables

R50M-50F ribbon cable 184526-0R3
R68M-50F MIO bulkhead ribbon cable 777660-0R3

Accessories

CA-1000 rack-mount kit (1U) 777665-01
CA-1000 stacking kit 777666-01
CA-1000 panel mount kit 187243-01
Strain Relief Kit[1] 187407-01

[1]You cannot use the Strain Relief Kit in conjunction with the rack-mount, panel-mount, or stacking kits.

For information on extended warranty and value added services, visit ***ni.com/services***.

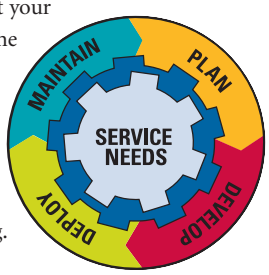
BUY ONLINE!

*Visit **ni.com/info** and enter ca1000.*

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

NI Services and Support

NI has the services and support to meet your needs around the globe and through the application life cycle – from planning and development through deployment and ongoing maintenance. We offer services and service levels to meet customer requirements in research, design, validation, and manufacturing. Visit ni.com/services.



Training and Certification

NI training is the fastest, most certain route to productivity with our products. NI training can shorten your learning curve, save development time, and reduce maintenance costs over the application life cycle. We schedule instructor-led courses in cities worldwide, or we can hold a course at your facility. We also offer a professional certification program that identifies individuals who have high levels of skill and knowledge on using NI products. Visit ni.com/training.

Professional Services

Our Professional Services Team is comprised of NI applications engineers, NI Consulting Services, and a worldwide NI Alliance Partner Program of more than 600 independent consultants and integrators. Services range from start-up assistance to turnkey system integration. Visit ni.com/alliance.

NATIONAL INSTRUMENTS™
Certified Alliance Partner

OEM Support

We offer design-in consulting and product integration assistance if you want to use our products for OEM applications. For information about special pricing and services for OEM customers, visit ni.com/oem.

Local Sales and Technical Support

In offices worldwide, our staff is local to the country, giving you access to engineers who speak your language. NI delivers industry-leading technical support through online knowledge bases, our applications engineers, and access to 14,000 measurement and automation professionals within NI Developer Exchange forums. Find immediate answers to your questions at ni.com/support.

We also offer service programs that provide automatic upgrades to your application development environment and higher levels of technical support. Visit ni.com/ssp.

Hardware Services

NI Factory Installation Services

NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI™ combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with ni.com/pxiadvisor.

Calibration Services

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. We provide manual calibration procedures, services to recalibrate your products, and automated calibration software specifically designed for use by metrology laboratories. Visit ni.com/calibration.

Repair and Extended Warranty

NI provides complete repair services for our products. Express repair and advance replacement services are also available. We offer extended warranties to help you meet project life-cycle requirements. Visit ni.com/services.

NATIONAL INSTRUMENTS™

ni.com • (800) 433-3488

National Instruments • Tel: (512) 683-0100 • Fax: (512) 683-9300 • info@ni.com

© 2004 National Instruments Corporation. All rights reserved. Product and company names listed are trademarks or trade names of their respective companies.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP