



Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

*InstraView*SM REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at www.instraview.com ↗

WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. www.artisanng.com/WeBuyEquipment ↗

LOOKING FOR MORE INFORMATION?

Visit us on the web at www.artisanng.com ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisanng.com | www.artisanng.com

Compact FieldPoint I/O Connectivity Accessories

Flexible I/O Connectivity

The NI Compact FieldPoint backplane provides standard 37-pin D-Sub connectors for signals from the I/O modules so you can choose the connectivity method that works best for your application. You have three options to connect field wiring to the 37-pin D-Sub connectors:

1. An integrated connector block – NI cFP-CB-1, cFP-CB-2, cFP-CB-3, cFP-CB-4, or cFP-CB-11
2. A cable to an external connector block mounted on a DIN rail
3. Your own custom cable

Integrated Connector Blocks

The most secure and compact connectivity option is to use the Compact FieldPoint integrated connector blocks – the cFP-CB-1, cFP-CB-2, cFP-CB-3, cFP-CB-4, and cFP-CB-11.



Figure 1. cFP-CB-1 General-Purpose Connector Block with Strain Relief

cFP-CB-1 (See Figure 1)

The cFP-CB-1, suitable for any I/O module, is a general-purpose connector block with strain relief. With 36 terminals, the connector block simplifies wiring by eliminating the need to connect more than one wire to a terminal. The cFP-CB-1 also features both a built-in strain relief bar and a separate wire tie connector, making it easy to create secure wiring setups for high shock and vibration applications.



Figure 2. cFP-CB-2 General-Purpose Connector Block with Front Accessibility

cFP-CB-2 (See Figure 2)

The cFP-CB-2, suitable for any I/O module, is a general-purpose connector block with front accessibility. With 36 terminals, the connector block simplifies wiring by eliminating the need to connect more than one wire to a terminal. The cFP-CB-2 also features a removable spring-terminal connector that allows easy front-panel access to the terminals for wiring. If your application is subject to hazardous voltage and/or high vibration, install the NI 9940 backshell on the spring-terminal connector.



Figure 3. cFP-CB-3 Isothermal Connector Block for Thermocouple Measurements

cFP-CB-3 (See Figure 3)

The cFP-CB-3 connector block is designed for use with NI cFP-TC-120 and cFP-TC-125 thermocouple input modules. The cFP-CB-3 uses isothermal construction to minimize thermal gradients on the I/O terminals. Although the cFP-CB-1, cFP-CB-2, cFP-CB-3, and cFP-CB-4 all feature a built-in thermistor for cold-junction compensation, NI strongly recommends using the cFP-CB-3 when measuring thermocouples for increased accuracy. The cFP-CB-3 also features both a built-in strain relief bar and a separate wire tie connector, making it easy to create secure wiring setups for high shock and vibration applications.

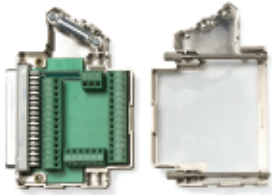


Figure 4. cFP-CB-4 Probeable Connector Block with Front Accessibility

cFP-CB-4 (See Figure 4)

The cFP-CB-4, ideal for prototyping and troubleshooting, is a probeable 20-pin connector block with front accessibility. The removable screw-terminal connector allows easy front-panel access to the terminals for wiring and probing. If your application is subject to hazardous voltage and/or high vibration, NI recommends affixing ferrules to the ends of all signal wires.

Compact FieldPoint I/O Connectivity Accessories



cFP-CB-11 (See Figure 5)

The cFP-CB-11 is a low-profile, general-purpose connector block suitable for any I/O module except the thermocouple module. These connector blocks feature a side exit for the wiring, making them a good fit for applications with limited front clearance. Because the connector blocks are smaller, the cFP-CB-11 is best suited for applications that use small-gauge wire or only a few channels.

Figure 5. cFP-CB-11 General-Purpose Connector Block for Low-Wiring Density and Low Clearance

Connector Block	Screw Terminals	Built-In CJC	High Shock and Vibration	Voltage Limit	Applications	Part Number
cFP-CB-1	36	4	4	250 V	General purpose with strain relief	778618-01
cFP-CB-2	36	4	4	250 V	General purpose with front accessibility	780017-02
cFP-CB-3	18	4	4	250 V	Isothermal for thermocouples	778618-03
cFP-CB-4	20	4	4	250 V	Probeable with front accessibility	780017-04
cFP-CB-11	37	-	-	24 V	Low-wiring density and low clearance	778618-11

Table 1. Compact FieldPoint I/O Connectivity Accessories

Module Compatibility

For easy wiring to multiple channels, the general-purpose connector blocks, cFP-CB-1 and cFP-CB-2, are recommended for I/O modules with more than eight channels. On the cFP-CB-3 and cFP-CB-4 connector blocks, use V terminals for V_{SUP} connections and use C terminals for COM connections, accordingly.

Analog Input	Channels	cFP-CB-1	cFP-CB-2	cFP-CB-3	cFP-CB-4
cFP-AI-100	8 voltage/current	✓ ¹	✓ ¹	–	✓
cFP-AI-102	8	✓	✓	–	✓
cFP-AI-110	8 voltage/current	✓ ¹	✓ ¹	–	✓
cFP-AI-111	16	✓ ¹	✓ ¹	–	✓
cFP-AI-112	16	✓ ¹	✓ ¹	–	✓
cFP-AI-118	8	✓	✓	–	–
cFP-TC-120	8	✓	✓	✓ ¹	✓
cFP-TC-125	8	✓	✓	✓ ¹	✓
cFP-RTD-122	8	✓	✓	–	–
cFP-RTD-124	8	✓	✓	–	–
cFP-SG-140	8	✓	✓	–	–
Analog Output					
cFP-AO-200	8	✓	✓	–	✓
cFP-AO-210	8	✓	✓	–	✓
Analog Input/Output					
cFP-AIO-600	4 input, 4 output	✓ ¹	✓ ¹	–	✓
cFP-AIO-610	4 input, 4 output	✓ ¹	✓ ¹	–	✓
Digital Input					
cFP-DI-300	8	✓ ¹	✓ ¹	–	✓
cFP-DI-301	16	✓ ¹	✓ ¹	–	✓
cFP-DI-330	8	✓ ¹	✓ ¹	–	✓
cFP-DI-304	32	✓	✓	–	–
cFP-DIO-550	8 input, 8 output	✓	✓	–	–
Digital Output					
cFP-DO-400	8	✓	✓	–	✓
cFP-DO-401	16	✓ ¹	✓ ¹	–	✓
cFP-DO-403	16	✓ ¹	✓ ¹	–	✓
cFP-DO-410	8	✓	✓	–	✓
cFP-RLY-421	8	✓	✓	–	✓
cFP-RLY-423	4	✓	✓	–	✓
cFP-RLY-425	8	–	–	–	–
Digital Specialty					
cFP-CTR-500	12 input, 8 output	✓ ¹	✓ ¹	–	✓
cFP-CTR-502	12 input, 8 output	✓ ¹	✓ ¹	–	✓
cFP-QUAD-510	4	✓	✓	–	–
cFP-PWM-520	8	✓	✓	–	✓
cFP-PG-522	8	✓	✓	–	✓

¹Recommended

Table 2. Module Compatibility

BUY ONLINE at ni.com or CALL 800 813 3693 (U.S.)

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 NI Professional Services team is composed of NI applications and systems engineers and a worldwide National Instruments 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.



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 Compact FieldPoint 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, backplanes, modules) purchased with FIS. To use FIS, simply configure your system online at ohm.ni.com/advisors/cfp.

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.



ni.com • 800 813 3693

National Instruments • info@ni.com



351599B-01

2008-9784-161-101-D

©2008 National Instruments. All rights reserved. FieldPoint, National Instruments, National Instruments Alliance Partner, NI, ni.com, and SCXI are trademarks of National Instruments. Other product and company names listed are trademarks or trade names of their respective companies. A National Instruments Alliance Partner is a business entity independent from NI and has no agency, partnership, or joint-venture relationship with NI.

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



Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

*InstraView*SM REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at www.instraview.com ↗

WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. www.artisanng.com/WeBuyEquipment ↗

LOOKING FOR MORE INFORMATION?

Visit us on the web at www.artisanng.com ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

Contact us: (888) 88-SOURCE | sales@artisanng.com | www.artisanng.com