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 PXI-8431/4* at our website: *Click HERE*

Technical Sales
United States
(866) 531-6285
info@ni.com

NI PXI-8431/4 (RS485/422)

High-Performance, 4-Port Serial Interface for PXI

- Compatible with Windows and LabVIEW Real-Time OSs
- Minimal CPU overhead with high-speed DMA interface; multicore processor and hyperthreading support
- Flexible standard and nonstandard baud rates from 57 baud to 3,000,000 baud
- 128 B transmit and receive FIFOs
- Selectable 4- and 2-wire transceiver modes for full- and half-duplex communication
- 4 converter cables (10P10C (RJ50) to DB9 male)



Overview

The NI PXI-8431/4 is a high-performance, 4-port serial interface for high-speed communication with RS485 devices at rates of up to 3 Mbit/s. High-performance RS485 interfaces are also available with two ports. The PXI-8431/4 offers flexible baud rates for data transmissions between 57 baud and 3,000,000 baud to within 1 percent accuracy for nonstandard baud rates and 0.01 percent accuracy for standard baud rates.

With the high-performance DMA engine, you achieve high throughput with minimal CPU usage. Using memory mapping, you can connect to more communication points without resource conflicts. National Instruments also offers easy-to-use powerful software that significantly reduces your development time for systems that use serial communication with the PXI-8431/4.

Specifications

Specifications Summary

General	
Product Name	PXI-8431/4 RS422/485 Serial Interface, 4-Port
Product Family	Serial
Form Factor	PXI Platform
PXI Bus Type	PXI Hybrid Compatible
Part Number	778985-01
Operating System/Target	Real-Time , Windows
LabVIEW RT Support	Yes
Voltage	5 VDC

Current	725 mA
Source	Internally Powered
Power Requirement for +3.3V Rail	0 A
Power Requirement for +5V Rail	1.1 A
Power Requirement for +12V Rail	0 A
Power Requirement for -12V Rail	0 A
Slot Two Module	No
Module Width	1
MXI Compatible	Yes
Serial Standard Compatibility	RS-422
Port Information	
Number of Ports	4
Max Cable Length	1.2 km
I/O FIFO Buffer Size	128 B
Max Device Connections / Port	31
Interrupt Sharing Between Ports	Yes
Direct Memory Access (DMA)	Yes
Physical Specifications	
Length	16 cm
Width	10 cm
I/O Connector	10-position modular jack
Minimum Operating Temperature	0 °C
Maximum Operating Temperature	55 °C

Pricing

NI PXI-8431/4 Packages

To use the NI PXI-8431/4 , you need all items in the diagram below. Select Option 1 if you already own a PXI System, or Option 2 if you do not already own a chassis, controller, or software.

Roll over the icons below to learn why you need each item in the system

PXI System

4 Cables **NI PXI-8431/4** Chassis Controller Software

NI PXI-8431/4 and Accessories Only

- Option 1: **NI PXI-8431/4 and Accessories Only**
- Option 2: **PXI System**

NI PXI-8431/4 - 778985-01	Qty	$ 640 each
Cables - Shielded RS485/RS422 Null Modem Cable (1m) - 183283-01 Select length: 1m 2m 4m	Qty	$ 27 each

Change Accessories
Learn about all compatible accessories and get recommendations based on your application needs.

Estimated Shipping Days: 10 - 15

Package Price: $ 748

Add to Cart >>

Guarantee your price for 30 days (learn more)

Instant Quote

Save for Later

Get Started with PXI

Choose from hundreds of specialized instruments to create a PXI System that suits your measurement needs and can scale for future applications. Then, we'll help you choose the right hardware and software to complete your configuration.

Add More Measurements and I/O Modules

Use the PXI Advisor to choose from a variety of modules including analog I/O, digital I/O, switching and more. Then, complete and price the PXI System.

Add Modules

Preview a Complete System

View and price a complete PXI configuration including the NI PXI-8431/4, chassis, and controller. Starting from the default configuration, you can add modules, accessories, and software and customize your system.

View and Price a Configured System

Services

System Assurance Programs

Reduce your setup time and total cost of ownership, and get a system you can use out of the box with National Instruments system assurance programs. System assurance programs include:

- Installation and integration test of all individual hardware
- Courtesy installation of system driver sets and application development environments
- Extended warranty and calibration coverage for up to five years
- Custom documentation plus a custom restore and startup utility

This service is only available for PXI, NI CompactRIO, and NI Compact FieldPoint systems.

- Learn More about System Configuration and Deployment Services [http://www.ni.com/services/configuration.htm]
- Customize Your CompactRIO System [http://ohm.ni.com/advisors/crio]
- Customize Your Compact FieldPoint System [http://ohm.ni.com/advisors/cfp]

- Customize Your PXI System [http://ohm.ni.com/advisors/pxi]
- Talk to an Expert about Custom System Configurations [javascript:openCallMeWindowCTA(document.referrer,%20'US')]

Extended Warranties

National Instruments designs and manufactures all products to minimize failures, however unexpected failures can still occur. Extended warranties provide a fixed economical price at the time of system purchase, covering any repair costs for up to three years. In addition, they offer the following benefits:

- Significant cost savings compared to individual repair incidents
- Fault location, diagnostics, and repair by NI any time the system product fails
- All parts and labor costs covered as well as any adjustments needed to restore the hardware to manufacturing specifications

For more information about your warranty options:

- Learn More about Warranty Services [http://www.ni.com/services/warranty.htm]
- Talk to an Expert about Extended Warranties [javascript:openCallMeWindowCTA(document.referrer,%20'US')]
- View Warranty Repair Policies [http://www.ni.com/services/warranty_repair_policies.htm]

Calibration

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. NI provides manual calibration procedures, services to recalibrate your products, and automated calibration software to calibrate many NI measurement products.

- Learn More about Calibration Services [http://www.ni.com/services/calibration.htm]

Training

NI training is the fastest, most certain route to productivity with NI tools and successful application development.

- Learn More about NI Training and Certification [http://www.ni.com/training/]
- Find a Course Near You and View Schedules [http://sine.ni.com/tacs/app/fp/p/ap/ov/pg/1/]

Repair Services

Return your registered product under warranty at no additional labor and parts cost. NI offers fault location, diagnostics, and repair any time the system fails as well as any adjustments needed to restore the hardware to manufacturing specifications.

- Learn More about Repair Services [http://www.ni.com/services/warranty.htm]
- Contact NI to Obtain a Return Material Authorization (RMA) Form and Shipping Instructions [http://sine.ni.com/apps/utf8/nicc.call_me]
- View Your RMA Support Request Status Online [http://www.ni.com/support/servicereq/]
- Register Your Product [http://www.ni.com/register]

Technical Support

ni.com/support [http://www.ni.com/support/]

Resources

Additional Product Information

- Product Certifications

Related Information

- How to Do a Serial Loopback Test
- Serial Communication Overview
- NI Serial Interface FAQs

© 2012 National Instruments Corporation. All rights reserved.

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