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

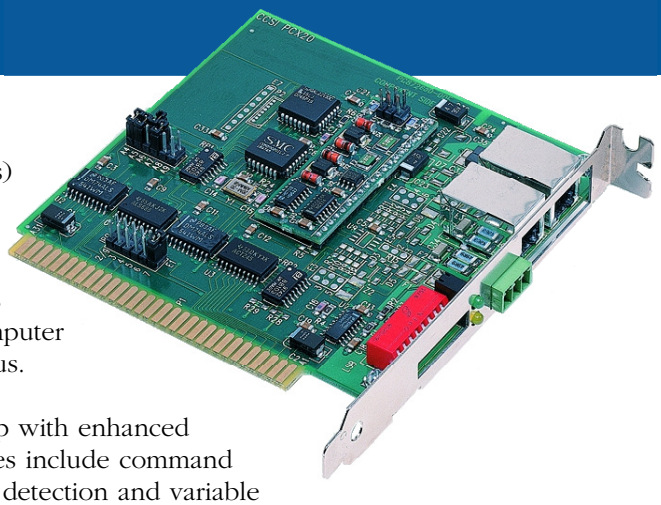
Expert team | Trust guarantee | 100% satisfaction

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

Find the *Contemporary Controls PCX20-485* at our website: *Click HERE*

PCX20 Series

ARCNET® Network Interface Modules for PC/XT/AT Bus Computers



Description

The PCX20 series of ARCNET network interface modules (NIMs) links PC/XT/AT compatible computers with the ARCNET local area network.

ARCNET is classified as a token-bus LAN operating at 2.5 Mbps while supporting 255 nodes. Interfacing ARCNET to a host computer usually requires a NIM which plugs into the host computer's bus.

The PCX20 incorporates the COM20020 ARCNET controller chip with enhanced features over the earlier generation ARCNET chips. New features include command chaining, sequential access to internal RAM, duplicate node ID detection and variable data rates up to 5 Mbps. Bus contention problems are minimized since the module only requires an I/O address. There is no requirement for wait-state arbitration.

Benefits

- COM20020 controller
- Interfaces ARCNET with PC/XT/AT (ISA) bus computers
- I/O only mapping reduces bus contention problems
- No requirement for wait-state arbitration
- Deterministic high speed 2.5 Mbps ARCNET token-passing local area network (LAN)
- Enhanced software capabilities over earlier generation ARCNET controllers
- Node address switch selects one of 255 possible station addresses
- Variable data rates up to 5 Mbps
- Supports coaxial, fiber optic and twisted-pair cabling including EIA-485
- Compatible with Contemporary Controls' MOD HUB and AI series active hubs
- CMOS design for low power consumption

Applications

- Data Acquisition
- SCADA
- Communication Gateways
- Machine Control
- Operator Interface
- Process Control

Each PCX20 module has two LEDs on the board for monitoring network operation and bus access to the module. The PCX20 also has an external DIP switch so that node addresses can be easily reassigned without removing the module.

There are several versions of the PCX20 ARCNET NIM. The PCX20-CXS supports coaxial star configurations requiring external active or passive hubs. The PCX20-CXB supports a multidrop or coaxial bus configuration usually requiring no hubs. Other versions include the PCX20-FOG which supports fiber optic cable with either ST or SMA connectors. The PCX20-TPB supports multidrop twisted-pair cabling using RJ-11 and screw terminal connectors. The PCX20-485 supports EIA-485 DC coupled backplane mode, while the PCX20-485D supports non-backplane mode DC EIA-485. The PCX20-485X provides transformer coupled EIA-485 operation.

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

Specifications

Environmental	
Operating temperature:	0°C to 60°C
Storage temperature:	-40°C to +85°C
Data Rates	
PCX20-CXS, -CXB, -TPB	2.5 Mbps
PCX20-FOG, -485, -485D	2.5 Mbps, 1.25 Mbps, 625 kbps, 312.5 kbps, 156.25 kbps
PCX20-485X	2.5 Mbps, 1.25 Mbps
PCX20/5-FOG, -485, -485D	5.0 Mbps, 2.5 Mbps, 1.25 Mbps, 625 kbps, 312.5 kbps
PCX20/5-485X	5.0 Mbps, 2.5 Mbps, 1.25 Mbps

Dimensions	3.9" x 4.3" (one-third height PC card) (99mm x 109mm)
Shipping Weight	1 lb. (.45kg)
I/O Mapping	Supports I/O mapping on any 16-byte boundary
Interrupt Lines	Supports strapping of IRQ2/9, 3, 4, 5, 6 or 7
Compatibility	PCX20 series NIMs are fully compatible with all of Contemporary Control Systems' ARCNET products and PC/XT/AT computers.

Transceiver Specifications (2.5 Mbps)

Transceiver	**Description**	**Cable**	**Connectors**	**Cable Length**		**Max Nodes/**
				Min	**Max**	**Bus Segment**
-CXS	coaxial star	RG-62/u	BNC	0	2000ft/610m	N/A
-CXB	coaxial bus	RG-62/u	BNC	6ft/2m[1]	1000ft/305m	8
-FOG	duplex fiber optic	50/125	SMA or ST	0	3000ft/915m	N/A
-FOG	duplex fiber optic	62.5/125	SMA or ST	0	6000ft/1825m	N/A
-FOG	duplex fiber optic	100/140	SMA or ST	0[2]	9000ft/2740m	N/A
-TPB	twisted-pair bus	IBM type 3	RJ-11, screw	6ft/2m[1]	400ft/122m	8
-485[3]	DC coupled EIA-485	IBM type 3	RJ-11, screw	0	900ft/274m	17
-485D	DC coupled EIA-485	IBM type 3	RJ-11, screw	0	900ft/274m	17
-485X	AC coupled EIA-485	IBM type 3	RJ-11, screw	0	700ft/213m	13

[1] This represents the minimum distance between any two nodes or between a node and a hub.
[2] This minimum can only be achieved by removing a jumper on the transceiver circuitry.
[3] Backplane mode operation.

Power Requirements

Model	**+5V**	**-12V**
PCX20-CXS	200mA	20mA
PCX20-CXB	200mA	50mA
PCX20-FOG-SMA	300mA	N/A
PCX20-FOG-ST	300mA	N/A
PCX20-TPB	200mA	50mA
PCX20-485	200mA	N/A
PCX20-485D	200mA	N/A
PCX20-485X	200mA	N/A
PCX20/5-485	200mA	N/A
PCX20/5-485D	200mA	N/A
PCX20/5-485X	200mA	N/A
PCX20/5-FOG-ST	300mA	N/A

Ordering Information

Model	**Description**
PCX20-CXS	20020 PC coaxial star NIM
PCX20-CXB	20020 PC coaxial bus NIM
PCX20-FOG-SMA	20020 PC SMA fiber optic NIM
PCX20-FOG-ST	20020 PC ST fiber optic NIM
PCX20-TPB	20020 PC twisted-pair bus NIM
PCX20-485	20020 PC DC coupled EIA-485 NIM
PCX20-485D	20020 PC DC coupled EIA-485 NIM
PCX20-485X	20020 PC AC coupled EIA-485 NIM
PCX20/5-485	20020 PC EIA-485 5Mbit NIM
PCX20/5-485D	20020 PC EIA-485 5Mbit NIM
PCX20/5-485X	20020 PC EIA-485X 5Mbit NIM
PCX20/5-FOG-ST	20020 PC ST fiber 5Mbps NIM

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