



These network interface cards allow connecting your computer to Serial Industrial Networks.

BradCommunications™ applicom® is the easiest and trouble free solution to quickly connect your visualization application to the industrial world.

14 May. 10
DW2005103

Serial Network Interface Cards

Best choice for SCADA/HMI applications

Features

- **New!**
 - ☐ Support of Windows 32-bit and 64-bit (WoW64)
 - ☐ Support of Windows Seven and 2008 Server
- 1, 2 or 4 Serial ports
- Large choice of Serial protocols, all included in the package.
- Certified with more than 50 SCADA/HMI packages
- On-board processor eliminates data bottle necks, ensuring delivery of time critical information
- Electrical Interfaces available:
 - ▶ RS232C
 - ▶ RS485 / RS422
 - ▶ Current Loop
 - ▶ Profibus RS485
 all with or without galvanic insulation (opto couplers)
- Speed: 50 to 38.400 Kbps
- Embedded Database (32 Kwords + 32 Kbits)
- Gateway feature with PCI4000
 - Serial ↔ Serial
 - Serial ↔ Profibus

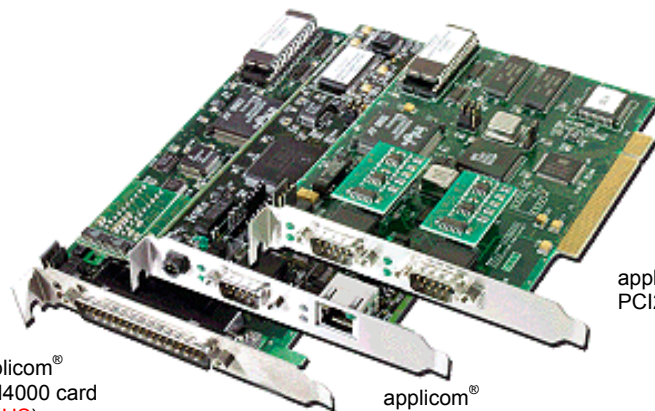
Supported OS

Standard package

- Windows 32-bit and 64-bit (WoW64)
 - ☐ Windows XP
 - ☐ Windows 2003 Server
 - ☐ Windows Vista
 - ☐ Windows Seven
 - ☐ Windows 2008 Server
 - ☐ Windows 2008 Server R2

Free Download

- Other operating systems
 - ☐ Ardenne RTX
 - ☐ VxWorks
 - ☐ QNX
 - ☐ Linux
 - ☐ DOS



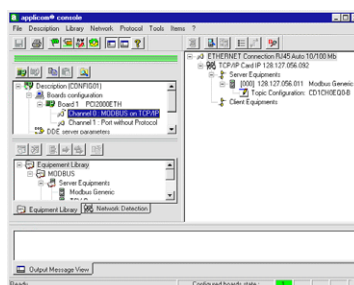
Overview

applicom® is a range of intelligent communication solutions, complete and ready to use covering more than 40 protocols among a wide choice of industrial networks and fieldbuses: Ethernet TCP/IP, Profibus, Modbus Plus, Data Highway Plus, WorldFIP and Serial Links. These solutions connect your PC-based applications (HMI, SCADA, MES, Custom applications) to industrial equipment (programmable controller, I/O modules, devices...).

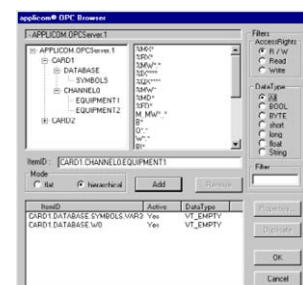
Thanks to applicom® smart technology - built-in processor, each interface card is able to execute all management and the processing (polling, frame management, etc.) of communications protocols, resulting in extremely fast, efficient application performance.

The applicom® software package includes:

- Graphical configuration software.
- Test and network diagnostic tools.
- Data servers
 - ✓ OPC DA v1.0a, v2.05 and v3.0 (including an OPC client with its source code)
 - ✓ Wonderware I/O Server (DAServer, DDE, FastDDE, SuiteLink)
- Development libraries
 - ✓ DLL Library
 - ✓ MS Visual Studio (.NET/C#/VB/C++/C), Borland Delphi, Windev
 - ✓ National Instruments (LabWindows CVI, LabVIEW/VI)



- Configuration Software -



- OPC Server -

Technical Specifications

	applicom® PCU1000 (3.3V / 5V)	applicom® PCIE1000
	 (RJ45 port is not usable)	 (RJ45 port is not usable)
Key Benefits	• Universal PCI 3.3 V / 5V (PCI-X compatible) • RoHS compliant • On-board processor	• PCI Express 1x • RoHS compliant • On-board processor
Hardware		
Unit	PCI Universal (3.3V / 5V), Short card, single slot	PCI Express 1x, v1.0a
Processor	AMD SC520 - 133 MHz	AMD SC520 - 133 MHz
Memory	16 Mbytes	16 Mbytes
Flash Memory	4 Mbytes	4 Mbytes
Interruption	Hardware Plug&Play	Hardware Plug&Play
DPRAM Address	Hardware Plug&Play (32 Kbytes)	Hardware Plug&Play (32 Kbytes)
Discrete Input	Opto-coupled discrete input, Voltage -> +10 to +30 DC or 24 V AC (50-60 Hz)	Opto-coupled discrete input, Voltage -> DC +10 to +30 or AC 24 V (50 to 60 Hz)
Discrete Output	« Watchdog » output contact free from potential, (floating) (24V DC, 0.25A)	« Watchdog » output contact free from potential, (floating) (24V DC, 0.25A)
Dimensions (LxW)	168mm x 107mm (6.61" x 4.21")	168mm x 107mm (6.61" x 4.21")
Consumption	5.5 W	5.5 W
Operating T°	0° C (32° F) ↔ +70° C (149° F)	0° C (32° F) ↔ +70° C (149° F)
Storage T°	-40° C (-40° F) ↔ +85° C (185°)	-40° C (-40° F) ↔ +85° C (185°)
EMC Compliance	Yes, Industrial and Office use	Yes, Industrial and Office use
RoHS Compliant	Yes	Yes
Communication port		
Port type	1 Asynchronous Serial port	1 Asynchronous Serial port
Connector	D-Sub, 9 pin, male	D-Sub, 9 pin, male
LED Indicators	2 leds: TX / RX	2 leds: TX / RX
Electrical Interface⁽¹⁾	RS485/422, galvanic insulation (500 V)	RS485/422, galvanic insulation (500 V)
Baud Rate:	50 bps ↔ 38400 bps	50 bps ↔ 38400 bps

(1): Also available on option: RS232 (2 or 6 wires), Current Loop 20mA by modifying the daughter card electrical interface.

Technical Specifications

	applicom® PCI2000 (5V)	applicom® PCI4000 (5V)
		
Key Benefits	• On-board processor • Gateway feature on 2 ports version	• RoHS compliant • On-board processor • Gateway on 2 ports • Mixed up to 4 Serial or Profibus⁽²⁾ ports
Hardware		
Unit	PCI (5V), short card, single slot	PCI (5V), short card, single slot
Processor	Intel 80386EX - 24 MHz	Intel 80386EX - 24 MHz
Memory	4 Mbytes	4 Mbytes
Flash Memory	-	-
Interruption	Hardware Plug&Play	Hardware Plug&Play
DPRAM Address	Hardware Plug&Play (2 Kbytes)	Hardware Plug&Play (32 Kbytes)
Discrete Input	-	-
Discrete Output	-	-
Dimensions (LxW)	145 x 106mm (5.70" x 4.17")	175 x 107mm (6.89" x 4.21")
Consumption	4 W	4 W
Operating T°	0° C (32° F) ↔ +70° C (158° F)	0° C (32° F) ↔ +70° C (158° F)
Storage T°	-40° C (-40° F) ↔ +80° C (176°)	-40° C (-40° F) ↔ +80° C (176°)
EMC Compliance	Yes, Industrial and Office use	Yes, Industrial and Office use
RoHS Compliant	No	Yes
Communication port		
Port type	2 Asynchronous Serial ports	4 Asynchronous Serial or Profibus ⁽⁴⁾ ports
Connector	D-Sub, 9 pin, male	D-Sub, 37 pin, male (see Remote Serial Splitter Box accessories).
LED Indicators	2 leds: TX / RX	On Remote Serial Splitter Box
Electrical Interface⁽³⁾	RS485/422, galvanic insulation (500 V)	RS485/422
Baud Rate:	50 ↔ 38400 bps	50 bps ↔ 38400 Kbps

(2): Profibus ports available via Remote Serial Panels BX4010 or BX4010R.

(3): Also available on option: RS232 (2 or 6 wires), Current Loop 20mA by modifying the daughter card electrical interface.

(4): 1x500 Kbps Profibus port + 3x9600 bps Serial ports or 2x187.5 Kbps Profibus port + 2x9600 bps Serial ports



Accessories for applicom® PCI-4000 card

Remote Serial Splitter Boxes

A variety of remote serial splitter boxes are available to split the D-Sub 37 pin port of the applicom® PCI-4000 card into 4 D-Sub distinct ports. A junction cable is used to connect the card to the remote panel.

BR4000



Format:	Desktop version
Port Type:	4 Serial ports, 9 pin, D-Sub male
Dimensions (LxWxH):	185 x 110 x 30 mm (7.28 x 4.33 x 1.18")
Junction cable:	1.5m (4.92")
Operating T°:	0° C (32° F) ↔ +65° C (149° F)
Storage T°:	-40° C (-40° F) ↔ +80° C (176°)

BX4010



Format:	Desktop version with galvanic insulation (2500V) based on opto couplers
Port Type:	4 Serial ports, 9 pin, D-Sub male
Dimensions (LxWxH):	275 x 175 x 67 mm (10.83 x 6.89 x 2.64")
Junction cable:	1.5m (4.92")
Operating T°:	0° C (32° F) ↔ +65° C (149° F)
Storage T°:	-40° C (-40° F) ↔ +80° C (176°)
LED Indicators:	2 leds: TX / RX
Power supply:	110V / 230V AC (internal switch)

BX4010R



Format:	1U-19" rack version with galvanic insulation (2500V) based on opto couplers
Port Type:	4 Serial ports, 9 pin, D-Sub male
Dimensions (LxWxH):	483 x 200 x 45 mm (19.02 x 7.87 x 1.77")
Junction cable:	1.5m (4.92")
Operating T°:	0° C (32° F) ↔ +65° C (149° F)
Storage T°:	-40° C (-40° F) ↔ +80° C (176°)
LED Indicators:	2 leds: TX / RX
Power supply:	110V / 230V AC (internal switch)

Serial Network Interface Cards



Protocols (all included with the package)

Serial	• Allen-Bradley - DF1 (PLC-5 and SLC Series)	M, C / S
	• GE Fanuc / Alstom - SNPX (90-XX and 80-XX Series)	M
	• Elsas Bailey - Data Link (5000 & 2000 Series)	M
	• Schneider Electric - Modbus RTU / ASCII	M / S
	• Moeller Group - Sucoma (PS32, PS316 Series)	M
	• Omron - Sysmac Way	M
	• Saia Burgess - S-Bus (PCD Series)	M
	• Siemens - 3964/3964R Free or RK512	M, C / S
	• Siemens - AS511 (S5 Series)	M
	• Siemens - PPI / PPI+ (S7-200 Series)	M
	• Siemens - TI-Dir (TI-505 Series)	M
	• Schneider Electric - Uni-Telway (TSX 17, 37, 57)	M / S, C / S
Profibus	• Profibus-DP	M
	• FDL S5 (Simatic S5 95U, 115U, 135U, 155U)	M
	• Siemens - S7 / MPI (S7-300, S7-400 Series)	M
	• FDL Send/Receive	C / S

M: Master, S: Slave, C: Client, S: Server

Ordering Information

Part Number	SAP	Product description
APP-SR1-PCU-C	1120205017	applicom® PCU1000, 1 Serial RS485/RS422 port, PCI 3.3V/5V bus (PCI-X compatible), RoHS compliant
APP-SR1-PCIE	1120205018	applicom® PCIE1000, 1 Serial RS485/RS422 port, PCI Express 1x, RoHS compliant
APP-SR2-PCI-C	1120200003	applicom® PCI2000, 2 Serial RS485/RS422 ports, PCI 5V bus, RoHS compliant
APP-SR4-PCI-C	1120200004	applicom® PCI4000, 4 Serial RS485/RS422 ports, PCI 5V bus, RoHS compliant
APP-INT-232-N	1120260003	RS232 electrical interface without galvanic insulation
APP-INT-232-G	1120260002	1x RS232 electrical interface with galvanic insulation
APP-INT-485-N	1120260005	2x RS485/RS422 electrical interface without galv. insulation
APP-INT-485-G	1120260004	1x RS485/RS422 electrical interface with galvanic insulation
APP-INT-CL2-N	1120260007	Current Loop 20 mA electrical interface (passive) (2 units)
APP-INT-PFB-G	1120170001	1x Profibus 485 electrical interface with galvanic insulation
APP-SBX-BRD ⁽¹⁾	1120320001	BR4000 Remote Serial Splitter Box, desktop version, 4 ports
APP-SBX-BXD ⁽¹⁾	1120320002	BX4010 Remote Serial Splitter Box, desktop version, 4 ports, galvanic insulation
APP-SBX-BXR ⁽¹⁾	1120320007	BX4010R Remote Serial Splitter Box, 19" 1U Rack Mountable, 4 ports, galvanic insulation

(1): Accessories for applicom® PCI4000 cards.

To contact us: www.woodhead.com

North America: US: +1 (630) 969-4550 – Canada: +1 519 725 5136
 Europe: France: +33 2 32 96 04 20 – Germany: +49 7252 94 96 0 – Italy: +39 (02) 950551 – UK: +44 (1252) 720720
 Asia: China: +86 21-5048-0889 Singapore: +65 6-268-6868 – Japan: +81 46-265-2325 – Korea: +82 31-492-9000

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