



BradCommunications™ applicomIO® CANopen network interface cards allow deterministic I/O data acquisition for PC-based control applications.

07 Jul. 10
DW200590

applicomIO® CANopen

Data acquisition for real time Control appl

Features

• **New!**

- Support of Windows 32-bit and 64-bit (WoW64)
- Support of Windows Seven and 2008 Server
- Support of PCI Express 1x form factor
- Automatic devices detection on the network
- Connect PC-Based Control applications directly to I/O devices
- Protocol: CANopen Master/Scanner
- 1 Serial or Ethernet port for remote configuration and diagnostic
- Embedded Communication on the card for powerful data throughput
- Automatic I/O mapping for easy configuration

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

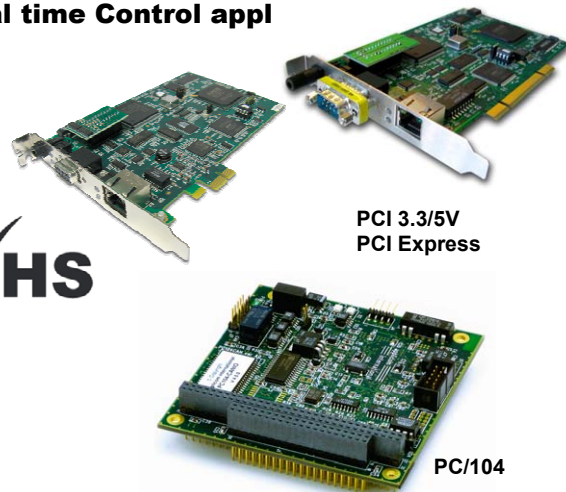
Free Download

- Other operating systems
 - Ardence RTX
 - VxWorks
 - QNX
 - Linux
 - DOS

CANopen



RoHS



PCI 3.3/5V
PCI Express

PC/104

Overview

Some of the world's most demanding high-speed control and automation applications run on standard PCs using BradCommunications™ applicomIO® fieldbus interface cards. Dedicated DCS and PLC systems have been eliminated in favor of open platforms running PC-based control systems.

The benefits include:

- Reduced material costs
- Reduced development times
- More flexible and customizable systems
- Reduced field-support costs

applicomIO products are design so industrial applications can be designed independently of the fieldbus used. **OEMs, system integrators** and **end-users** can take advantage of developing standard control applications as well as selecting the fieldbus connectivity required from the applicomIO product range.

applicomIO products consist of a fieldbus card and engineering tools which quickly and easily setup communication. EVERYTHING is included for a successful implementation at a lower cost.

applicomIO provides connectivity support for all popular fieldbuses including **EtherNet/IP, PROFINET IO, Modbus TCP, PROFIBUS, DeviceNet** and **CANopen**. Our cards are developed in compliance with the technical specifications of industrial organizations and comply with the applicable industrial standards. applicomIO supports up to 8 cards in a single PC and can run on various operating systems including Windows 32-bits, Linux as well as real-time OS such as VxWorks, QNX, and VenturCom RTX.

Particularly, the **BradCommunications™ CANopen** interface cards are equipped with 1 CANopen port handling CANopen protocol in **Master mode** up to 1Mbps.

A smart A.D.M (Automatic Dual port ram Mapping) mechanism avoids the I/O tags configuration in the Dual Port RAM of the card. More than a simple I/O acquisition card, the applicomIO® CANopen interfaces provide the applications with additional information such as: *device status and diagnostics, process data read/write monitoring, communication tools for troubleshooting, hardware and software Watchdog, etc..*

The communication layers are completely embedded on the cards, allowing easy and fast communication with field devices resulting in remarkable application performance.

Product package includes:

- Fieldbus interface card
- Engineering console for configuration and diagnostic tools
- Data servers (OPC DA 3.0 & 2.05, DAServer, FastDDE/SuiteLink)
- Development libraries: Windows (DLL), VenturCom (RTX)
- Static library for non-windows OS (VxWorks, QNX, Linux, etc)

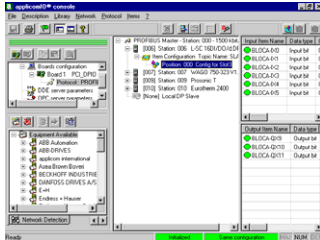
BradCommunications™

applicomIO® CANopen

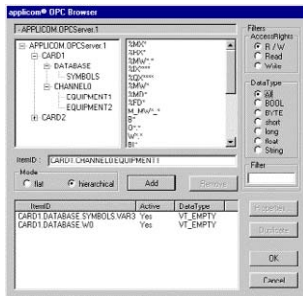


Software tools

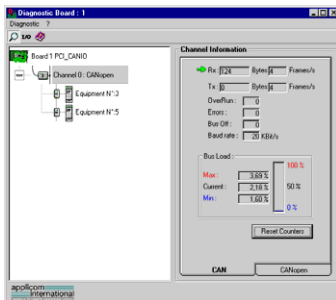
The applicomIO® Interface cards provide effective software tools enabling fast integration of industrial communication into your applications. The console is common to all fieldbuses of Woodhead offer as Profibus-DP, EtherNet/IP, PROFINET IO, Modbus/TCP and DeviceNet.



- Configuration console -



- OPC Browser -



- Diagnostic and test tools -

Hardware specifications

	PCU-CANIO	PCIE-CANIO	PC104-CANIO
Bus interface	PCI Universal 3.3/5V (PCI-X compatible)	PCI Express 1x	PC/104 bus
Processor	AMD SC520		
Memory	8 Mbytes SDRAM		
Interruption	Hardware Plug&Play		2, 3, 4, 5, 6, 7, 10, 11, 12, 14, 15
DPRAM Address	Hardware Plug&Play (8 Kbytes used per card)		From C8000 to DE000
Dimensions (L x W)	168mm x 107mm		95mm x 90mm
Consumption	6W (max. 1.2A)		5W (max. 0.8A)
Operating Temp.	0°C up to +65° C		0°C up to +65° C
Storage Temp.	-40°C up to +80°C		-40°C up to +85°C
Discrete Input	Opto-coupled discrete input -> DC +10 to +30 or AC 24 V (50 to 60Hz)		
Discrete Output	"WatchDog" output contact free from potential (floating) (24V DC, 0.25 A)		
EMC Compliance	EN55022 Class B, EN61000-6-2, EN61000-3-2, EN61000-3-3		
RoHS Compliance	Yes		

1 CANopen port

Connector type	CANopen Standard, 9-pin Sub-D male (gender changer Sub-D Male/Male supplied)	HE13 (2 x 5 pins)
CAN Controller	Phillips SJA 1000	
CAN Transceiver	Phillips 82C251	
Speed	1, 10, 20, 50, 100, 125, 250, 500, 800, 1000 Kbps	
LED indicators	1 Status LED / 1 transmission LED	

Port for remote configuration and diagnostic

Port Type	Ethernet port	Serial port
Connector type	Base T - RJ45	HE13 (2 x 5 pins)
LED indicators	4 LEDs - TX/RX/Link/100 Mbps	-
Electrical interface	Ethernet IEEE 802.3	RS232
Speed	10/100 Mbps (auto-negotiation)	

Protocol Specifications

CANopen	Specifications
	<ul style="list-style-type: none"> Specifications CIA DS 301 v4.0, DS302 v4.02 Supported profiles: DSP 401, DSP 402, DSP 403, DSP 404, DSP 406 Connect up to 127 Slave stations Send/Rec of PDO's (3500) and TPDO/RPDO (256/256) PDO modes: Event driven, Sync Cyclic, Sync Acyclic, Async Dynamic PDO mapping Integrated data consistency Direct access to variable types (bit, byte, word, double word) EDS Library

Ordering Information

Part Number	SAP	Product Description
DRL-CNO-PCU	112021-0014	BradCommunications™ applicomIO® PCU-CANIO CANopen card, PCI-Universal bus, 3.3/5V
DRL-CNO-PCIE	112086-5018	BradCommunications™ applicomIO® PCIE-CANIO CANopen card, PCI Express 1x
DRL-CNO-104	112023-0007	BradCommunications™ applicomIO® PC104-CANIO CANopen card, PC/104 bus

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

Brad is a registered trademark and BradControl, BradCommunications, applicom, Direct-Link and SST are trademarks of Molex Incorporated. © 2010 Molex