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

Direct-Link™ CANopen

Data acquisition for real time

PCI-Universal

PC/104

Features

- **NEW! RoHS compliant**

- **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**

OS supported

Standard package
- **Windows 32-bit (XP SP1/ 2000 SP4 / NT SP6, 2003 Server), Ardence RTX**

Free Download
- **Windows XP Embedded, QNX, VxWorks, Linux, Phar Lap ETS, DOS**

Woodhead is a member of CIA organization (CAN in Automation)

Overview

BradCommunications™ Direct-Link™ is a low range of automation components for industrial communication. It includes a variety of products such as diagnostic tools, intelligent connectors, tunneling gateways, fieldbuses network interface cards, and software drivers for industrial networks.

Simple as they are affordable, BradCommunications™ Direct-Link™ products allow you to acquire the equipment to develop your architectures and industrial applications at a lower cost.

Direct-Link™ products are characterized by their simple use and fast implementation; they are modular and scalable. Moreover, they are designed to be easily embedded into computerized systems and are available in a wide selection of form factors.

Powerful Network Interface card

Particularly, the **BradCommunications™ Direct-Link™ 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 Direct-Link™ PCU-CANIO/PC104-CANIO 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:
- Graphical console for configuration and diagnostic tools
- Data servers (Multi-protocol OPC DA 3.0 & 2.05, ActiveX, DAServer, FastDDE/SuiteLink)
- I/O libraries for Windows (DLL) and Ardence's hard real time extensions (RTX)
- Static library for non-windows OS

BradCommunications™

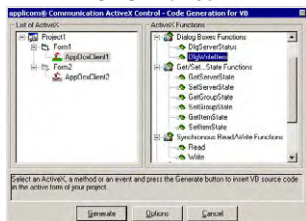# Direct-Link™ CANopen

Software tools

Direct-Link™ 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, Modbus/TCP and DeviceNet.
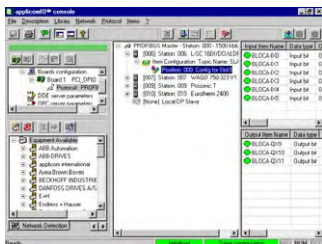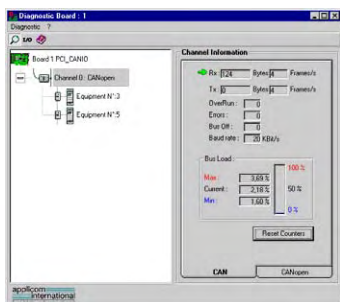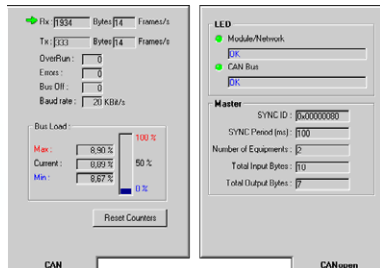

- Configuration console -

- OPC Browser -

- ActiveX implementation -

- Diagnostic and test tools -

Hardware specifications

	PCU-CANIO	PC104-CANIO
Bus interface	PCI Universal 3.3/5V, PCI-X compatible **NEW**	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 (8 Kbytes used per card)
Dimensions (L x W)	168mm x 107mm (6.61" x 4.21")	95mm x 90mm (3.74" x 3.54")
Consumption	6W (max. 1.2A)	5W (max. 0.8A)
Operating Temperature	0ºC (32ºF) up to +65° C (149ºF)	-40ºC (-40º F) up to +85ºC (185º F)
Storage Temperature	-40ºC (-40ºF) up to +80ºC (176ºF)	-40ºC (-40º F) up to +85ºC (185º F)
Discrete Input	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, 0.25 A)	
EMC Compliance	EN55022 Class B, EN61000-6-2, EN61000-3-2, EN61000-3-3	
RoHS Compliance	YES **NEW**	

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 **NEW**	Asynchronous Serial port
Connector type	BaseT - 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)	50 to 38400 bps

Protocol Specifications

CANopen	▪ 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	Product Description
DRL-CNO-PCU	BradCommunications™ Direct-Link™ PCU-CANIO CANopen card , PCI-Universal bus, 3.3/5V
DRL-CNO-104	BradCommunications™ Direct-Link™ PC104-CANIO CANopen card, PC/104 bus

For product and technical information, visit: **www.woodhead.com**

Network Interface

BradCommunications™
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