BradCommunications™ applicomIO® Ethernet network interface cards provide powerful and reliable data acquisition for PC-based control and visualization applications.

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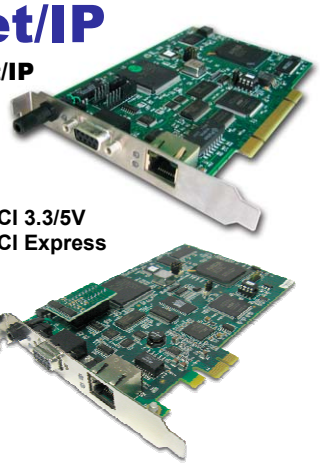
applicomIO® EtherNet/IP

Best Choice for controlling I/O over EtherNet/IP



PCI 3.3/5V
PCI Express

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**
- **Protocols:**
  - **EtherNet/IP Master/Scanner**
  - **EtherNet/IP Adapter**
- **Reliable solution based on embedded protocol technology for powerful data throughput**
- **Single-time development of API for whatever fieldbus used**
- **"User-friendly" engineering tools for configuration and diagnostics**
- **Remote connection through Ethernet port (for embedded system platform)**
- **Application watchdog**
- **Automatic I/O mapping for easy configuration**
- **I/O exchange up to 14 Kbytes**

Typical Application

- **PC-Based Control**
- **Robotic application**
- **Panel PC visualization system**

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

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 applicomIO® network interface card provides high-speed deterministic communication to exchange data with industrial devices through **EtherNet/IP messaging**. The built-in processor handles all the protocol management to offer reliable and outstanding performance.

The software package includes a common development library for all fieldbuses supported. The process data is exchanged with the control application through a shared memory where inputs/outputs are automatically mapped. To monitor the communication between the card and the control application, the library includes a watchdog feature to automatically detect software blocking.

ARE YOU LOOKING FOR A REAL TURNKEY SOLUTION?
applicomIO® configuration software console provides a standardized and user-friendly environment for quick development of communication applications without the worry of knowing industrial communication protocols. The console saves time during the commissioning phase by offering features such as automatic device detection, user configuration management, diagnostic information, etc.

The product package includes:

- Fieldbus interface card
- Engineering console for configuration and diagnostics
- Data Servers (OPC DA v3.0 & v2.05, Wonderware DAServer and FastDDE/SuiteLink)
- Development Libraries: Windows (DLL), VenturCom (RTX)
- Static library for non-windows OS (VxWorks, QNX, Linux, etc)

BradCommunications™

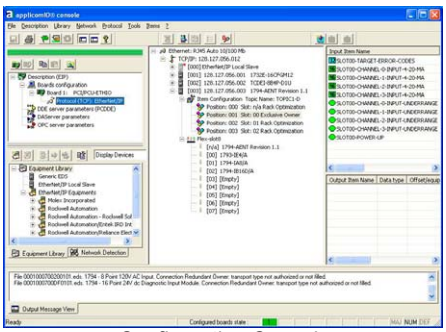
Woodhead

applicomIO® EtherNet/IP

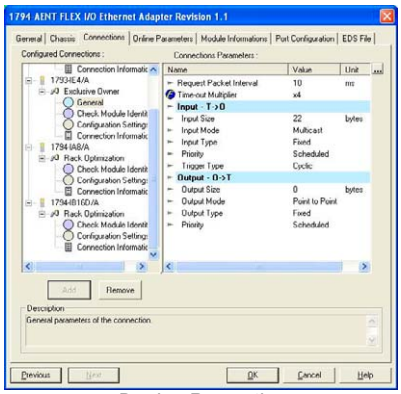
Network Interface

Software tools

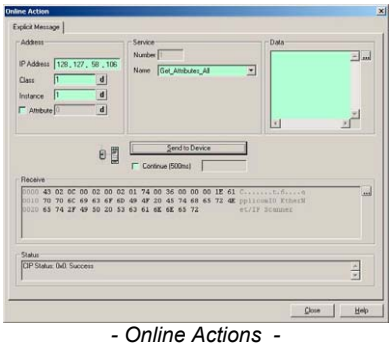
applicomIO® software tools enable fast integration of the fieldbus into your control application. No matter the fieldbus; the console remains the same.



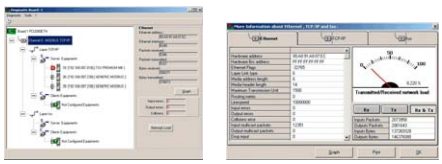
- Configuration Console -



- Device Properties -



- Online Actions -



- Diagnostic and Test tools -

Hardware specifications

Bus interface	▪ PCI rev 2.2, 32-bit, 33 MHz, PCI Universal 3.3V/5V keying, PCI-X compatible ▪ PCI Express 1x
Processor	AMD SC520 - 133 MHz
Memory	SDRAM: 16 Mbytes Flash: 4 Mbytes
Interruption	Hardware Plug&Play
DPRAM Address	Hardware Plug&Play (32 Kbytes used per card)
Dimensions (L x W)	168mm x 107mm (6.61" x 4.21")
Consumption	5.5 W
Operating Temperature	0° C (32° F) ↔ +65° C (149° F)
Storage Temperature	-40° C (-40° F) ↔ +85° C (185° F)
Discrete Input	1x Opto-coupled
Discrete Output	1x "WatchDog" (dry contact)
EMC Compliance	EN55022 Class B, EN61000-6-2, EN61000-3-2, EN61000-3-3
RoHS Compliance	YES

1 Ethernet port

Port type	Ethernet port IEEE 802.3 for industrial applications
Connector type	BaseT (RJ45)
Speed	10/100 Mbps (Auto-negotiation)
LED indicators	4 LEDs - TX, RX, Link, 100 Mbps
Remote Access	Also usable for remote and diagnostic configuration

Protocols supported

Protocol	Specifications
EtherNet/IP	▪ EtherNet/IP - Explicit Msg and Implicit Msg (I/O Control) ▪ I/O Master/Scanner and Slave according to EtherNet/IP specifications ▪ Up to 128 simultaneous CIP based connections ▪ EtherNet/IP Devices supported: Generic and Rockwell I/O through EDS files (FlexIO, CompactLogix, etc) ▪ IP address settings configurable via the console or DHCP/BOOTP server ▪ Client DNS Supported ▪ ODVA Conformance Tested

Ordering information

Part Number	SAP	Product description
DRL-EIP-PCU	112000-5030	BradCommunications™ applicomIO® PCU-ETHIO Ethernet card for EtherNet/IP Scanner/Adapter, PCI 3.3/ 5V
DRL-EIP-PCIE	112000-5033	BradCommunications™ applicomIO® PCU-ETHIO Ethernet card for EtherNet/IP Scanner/Adapter, PCI Express 1x

Also available Modbus TCP and PROFINET IO network interface cards.

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