

Anybus Communicator Common Ethernet to Common Ethernet

Item number: ABC4090-A

The Anybus Communicator Common Ethernet to Common Ethernet enables you to interconnect PROFINET, EtherCAT, EtherNet/IP, and Modbus TCP control systems. Anybus Communicators ensure reliable, secure, and high-speed data transfers. The intuitive user interface makes them incredibly easy to use.



A protocol converter that interconnects Industrial Ethernet control systems

Features and benefits

- ✓ **Transfer up to 1500 bytes to and from the controller (PLC)**
Transfer up to 1500 bytes (network dependent) in each direction (3000 bytes total) via dual 10/100 Mbit full duplex RJ45 ports with an integrated switch for daisy-chaining.
- ✓ **Instant data transfer**
The Communicator transfers data instantly between networks, with processing time so low you don't even need to count it, as it's in line with network jitter. Just add the cycle times of both networks to get the total transfer time.
- ✓ **Diagnostics and support**
The user interface shows connection status, allowing you to monitor the data going through the gateway. Monitor and control offline behavior via the Status Byte and Clear Data features. Our global support team is ready to help if needed.
- ✓ **Secure and segment networks**
Secure boot blocks malware, while a security switch locks configurations to prevent unauthorized changes. Network segmentation is inherent in the design, as each network is run separately, with only configured data transferred between networks.
- ✓ **Selectable Industrial Ethernet network**
Cover multiple protocols with a single Communicator. Supports EtherNet/IP, EtherCAT, Modbus TCP, and PROFINET. Download firmware for your desired protocols from the product webpage and upload it via the Communicator's interface.
- ✓ **Configure via web interface over Ethernet**
With a graphical and responsive web interface, configuration is a breeze. In addition, there's no software to install and the dedicated Ethernet configuration port makes it easy to get started.
- ✓ **Drop-in replacement**
Already using an X-gateway? Don't worry, with legacy mode you can continue using the same configuration in your controller/PLC.
- ✓ **Built for factory floors**
The Gateway is made with industrial-grade components, verified to meet industry standards, and backed by a 5-year warranty. Its slim form factor, front-facing ports, and cable tie make DIN-rail installation easy.

Anybus Communicator Common Ethernet to Common Ethernet



General	
Net Width (mm)	27
Net Height (mm)	144
Net Depth (mm)	98
Net Weight (g)	150
Packed Width (mm)	35
Packed Height (mm)	170
Packed Depth (mm)	115
Packed Weight (g)	185
Operating Temperature °C Min	-25
Operating Temperature °C Max	70
Storage Temperature °C Min	-40
Storage Temperature °C Max	85
Relative Humidity	0-95% Non-condensing.
Current Consumption Type Value at Vcc Nom (mA)	90mA @ 24V DC (2.2W)
Current Consumption Max value at Vcc nom (mA)	125mA @24V DC (3W)
Input Voltage (V)	12-30V DC
Power Connector	3-pin, 5.08 Phoenix plug connector
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes

Anybus Communicator Common Ethernet to Common Ethernet



General

Isolation	Yes
Maximum Installation Altitude (m)	2000
Content of Delivery	Product, installation sheet, connectors
Mounting	DIN-rail (EN 50022 standard)
Housing Materials	PC ABS, UL 94 VO
Packaging Material	Cardboard
Warranty (years)	5

Identification and Status

Product ID	ABC4090-A
Model Code	40-ETH-ETH-B
Predecessor	AB7632-F, AB7682-F, AB7649-F, AB7901-F, AB7650-F, AB7684-F
Country of Origin	Sweden
HS Code	8517620000
Dual Usage	No
Export Control Classification Number (ECCN)	5A991.b.1

Physical Features

Connectors / Input / Output	2xRJ45;2x RJ45;RJ45 Config port
Push Buttons	Factory reset
DIP & Rotary Switches	Security lock switch
Contains Battery	No

EtherCAT Features

EtherCAT Mode	Slave / SubDevice
---------------	-------------------

Anybus Communicator Common Ethernet to Common Ethernet



EtherCAT Features

EtherCAT Supported Functionality	COE (Can Over EtherCAT); PDO, SDO; APRD, ARMW, APWR, BRD, BWR, FPRD, FPRW, FPWR, FRMW, LRD, LRW, LWR
EtherCAT Configuration File	ESI available
EtherCAT Bandwidth	10/100 Mbit down to 100us cycle time
EtherCAT Input Data Size	1486 bytes
EtherCAT Output Data Size	1486 bytes

EtherNet/IP Features

EtherNet/IP Mode	Adapter / Slave
EtherNet/IP Supported Functionality	Endian conversion (byte swap); QoS; Ethernet/IP Class 1 and 3; Quick Connect Class B; DLR (beacon mode); Daisy Chainging; CT19 ODVA Conformance
EtherNet/IP Configuration File	EDS available
EtherNet/IP Bandwidth	10/100MBit down to 1ms cycle time
EtherNet/IP Input Data Size	1448 bytes
EtherNet/IP Output Data Size	1448 bytes

Modbus-TCP Features

Modbus-TCP Mode	Slave / Server
Modbus-TCP Supported Functionality	Modbus specification V1.1b3; 4 connections; Daisy chaining
Modbus-TCP Functions Supported	1, 2, 3, 4, 5, 6, 15, 16, 23, 43/14
Modbus-TCP Bandwidth	10/100 Mbit/s
Modbus-TCP Input Data Size	1500 bytes
Modbus-TCP Output Data Size	1500 bytes

PROFINET Features

PROFINET Mode	Slave
PROFINET Supported Functionality	RT; Daisy chaining;

Anybus Communicator Common Ethernet to Common Ethernet



PROFINET Features

PROFINET Conformance Class	Class B
PROFINET Configuration File	GSDML available
PROFINET Bandwidth	10/100MBit down to 1ms cycle time
PROFINET Input Data Size	1024 bytes
PROFINET Output Data Size	1024 bytes

Certifications and Standards

Protection Class IP	IP20
RoHS Compliant	Yes
Recycle / Disposal	Yes
CE	Yes
FCC	No
UL	Yes
cUL	Yes
UL Information	E214107: Ord.Loc UL 61010-1, CSA C22.2 No. 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-2-201
ATEX	No
KC	Yes
EMC	Yes
Environment	EN 55016-2-3 Class A, EN 55032 Class A, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6
Waste Certification (WEEE)	Yes
WEEE Category	IT and telecommunications equipment



Use Case



The communicator can be used wherever there is a need to transfer data between control systems using different industrial protocols.