Pluto gateway EtherNet/IP

GATE-EIP

Application:

- Bi-directional status information from the Pluto safety PLC
- EtherNet/IP

Features:

- Two-way communication
- Compact enclosure
- Two Ethernet ports for cascading and servicing
- Automatically configuration of IP-address (DHCP)
- Fast response time
- Fast startup
- Common interface with Pluto
- Ready-made function blocks

Compact and fast

Pluto Ethernet gateway is a compact and fast unit providing two-way communication between a Pluto safety PLC and EtherNet/IP fieldbuses.

The Pluto gateway is a 22 mm wide unit mounted on a DIN rail, and can be connected anywhere on a Pluto safety bus. The unit has a common interface with Pluto, i.e. the same cabling, and the Pluto Manager PC program can be used for servicing and where necessary for configuration.

When programming Pluto there are ready-made function blocks which, via the Pluto gateway, send and receive data from the non-safe system.

Dual Ethernet ports

GATE-EIP has two Ethernet ports working as an Ethernet switch. This gives the possibility to cascade it with other units which reduces cabling and need of ports in switches. Another use can be that one port is used for connection of a PC for servicing in the same time as the GATE-EIP is connected to the system.

Protocol

Pluto Gateway GATE-EIP handles the status from and to Pluto safety PLCs via Ethernet protocol EtherNet/IP.

Automatic configuration

The gateway supports DHCP which means that it gets the IP-address automatically. It can also be manually configured via a simple web server in the gateway or by using the serial port in the front.

Data from Pluto

Via the EtherNet/IP protocol a non-safe PLC system can have access to the I/Os and other variables in a Pluto safety PLC. Global I/Os in a Pluto safety PLC are accessible via the usual I/O transfer in the protocol. Local data in Pluto units can be transmitted by function blocks in Pluto called “Additional data”.

Data to Pluto

Via the EtherNet/IP protocol a non-safe PLC system can transmit non-safety information to a Pluto safety PLC. A total of 16 byte data can be transmitted, 64 boolean variables / 8 registers or a combination of them. Function blocks for receiving the data are available in Pluto Manager.

Technical data - GATE-EIP

Article number	2TLA020071R9000
Buses	Pluto-bus CAN (isolated) EtherNet/IP (isolated)
Pluto safety bus speeds	100, 125, 200, 250, 400, 500, 800 and 1000 kbit/s (automatic speed detection)
Ethernet	10/100 Mbit/s Half and full duplex
Ethernet protocol	Status from and to Pluto safety PLC - EtherNet/IP Gateway status and IP address configuration - Web server - Terminal server (TCP/IP)
EtherNet/IP	According to ODVA “CIP Edition 3.2” and “EtherNet/IP Adaption of CIP Edition 1.3”. Minimum RPI of 50 ms
Web server	Status, IP-address configuration and software update (port 80)
Terminal server (TCP/IP)	Simple server with the same commands as via the serial programming port in the unit.
IP address	Static, DHCP and BOOTP. Set via terminal (PC-port) or web server.
Gateway configuration	Takes place via EtherNet/IP via the binary TCP/IP server.
Connections	Top, 3-pole terminal for Pluto safety bus (included) Bottom, 2 Ethernet connections via RJ-45 (screened cable cat. 5e FTP) Front, Serialport 2-pole terminal for 24 VDC (included)
Status indications	Pluto safety bus status indication via LED (Pluto safety bus) EtherNet/IP module status indication via LED (Mod Status) EtherNet/IP network status indication via LED (Net Status)
Operating voltage	24 VDC, -15 % to +20 %
Current at 24 V	< 200 mA (recommended fuse ≤6 A)
Dimensions (w x h x d)	22.5 x 108 x 114 mm
Installation	35 mm DIN rail
Operating temperature (ambient)	-10°C to + 55°C
Temperature, transport and storage	-25°C to + 55°C
Humidity	EN 60 204-1 50 % at 40°C (ambient 90 % at 20°C)
Enclosure classification	IP20 - IEC 60 529
Accessories	
To PC-port (front connector)	
Cable (serial)	2TLA020070R5600
Cable (USB)	2TLA020070R5800

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