

ESEPRO

Profibus gateway for Woodward Easygen genset controls and LS-5 controls



ESEPRO is a Profibus gateway specifically designed to interface Woodward's Easygen series genset controls with Profibus-DP networks. It interfaces via the CAN bus with the Woodward controls and is easy to configure using standard Profibus configuration tools like Simatic Manager.

A single ESEPRO added to the CAN network will make all Visualisation Data of connected Woodward CANopen controls available without adding additional load to the CAN bus communication. The Visualisation Data is buffered in the ESEPRO gateway which decouples Profibus' cyclic process I/O from the CANopen cyclic TPDO transfers.

The ESEPRO appears as a modular I/O module in the Profibus configuration tool.

The ESEPRO offers three different methods to map data into the PLC's process I/O image to suit different application requirements and programming styles. Visualisation Data of connected Easygen and LS-5 devices can be mapped directly into the PLC's process image. For larger data tables which exceed the Profibus I/O space, an indexed mapping similar to the Profidrive standard can be used. Alternatively access to larger data tables via acyclic DP-V1 transfers is also possible. In addition, read and write access to the Easygen's device Parameter IDs is possible which are internally translated to CANopen SDO transfers.

Common applications include:

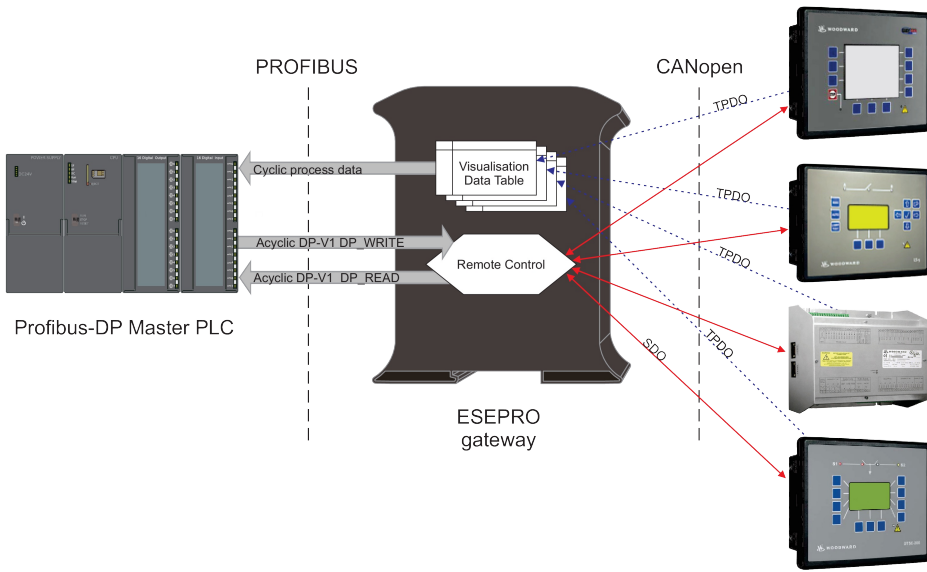
- PLC connection
- Operator panel interfacing
- HMIs
- SCADA integration
- Power station automation
- Gen set control
- Remote control & monitoring
- Data logging

Features

- Supports Easygen-3000 Series (3500, 3400, 3200, 3100)
- Supports Easygen-2000 Series
- Supports Easygen-1000 Series
- Supports LS-5
- Supports DTSC-200
- Addresses up to 8 Woodward controls
- Easy configuration using Simatic Manager
- Direct mapping of data into process I/O
- Fast indexed access to Basic Visualisation Data table
- Acyclic DP-V1 functions to read and write Remote Control words
- Acyclic DP-V1 access to larger data blocks
- Reading and Writing of device parameters
- Internal buffer for Visualisation Data
- Transparent handling of data guarantees future compatibility
- Firmware upgradable via Ethernet bootloader

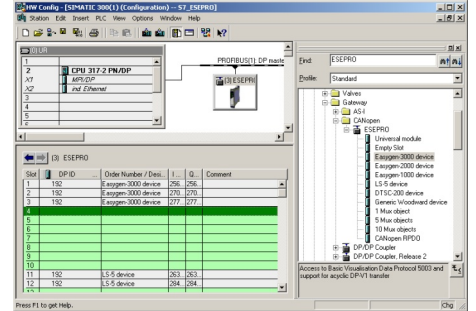


Usage

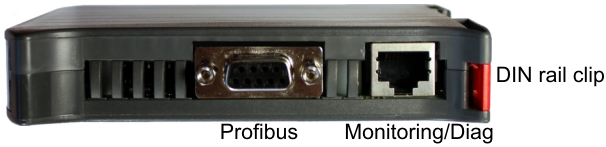


Order Information

Model number	Configuration
ESEPRO	Gateway with Profibus and CAN interfaces in DIN rail enclosure



Connections



Specifications

Interfaces

- 1 Profibus
- 1 CAN
- 1 Ethernet for Monitoring/Diagnostics

User interface

- Power, Device, Profibus/CAN & Ethernet Status LEDs
- Web browser interface for Monitoring

Profibus interface

- DE9F with Profibus standard pinout
- EIA-485-A (RS-485) physical layer
- 9.6 kBit/s - 12 MBit/s
- Profibus DP-V0 and DP-V1 Slave
- 500 V galvanic isolation

CAN interface

- DE9M with industry standard CiA DS-102 pinout
- ISO 11898 physical layer
- 250 kBit/s
- CANopen consumer & client
- Addresses up to 8 nodes

Ethernet port

- IEEE 802.3i 10BASE-T
- IP, TCP, HTTP, ARP, TFTP
- 1.5 kV galvanic isolation

Power requirements

- 10-30 V DC, 1 W
- 30 mA typical @ 24 V DC

High availability

- Watchdog supervision
- Brown-out detection

Electromagnetic compatibility

- Emissions CISPR 22/EN 55022 (Class A)
- Immunity EN55024
- Electrostatic discharge EN61000-4-2
- Radiated RF EN61000-4-3
- Fast transients EN61000-4-4
- Conducted RF EN61000-4-6

Environment

- 0° to 60 °C / 32 to 140 °F operating temperature
- 25° to 80 °C / -13 to 185 °F storage temperature
- 10 to 95% humidity, non-condensing

Form factor / enclosure

- Self-extinguishing PC/ABS (UL 94-V0)
- 35 mm DIN rail mountable
- IP 20 / NEMA Type 1
- Convection cooling
- 101 x 22.5 x 120 mm / 3.98 x 0.886 x 4.72 in
- 0.13 kg / 0.287 lbs

Compliance

- C-Tick
- CE, RoHS
- FCC Part 15 (Class A)
- ICES-003 (Class A)