

# CANopen-PN

## PROFINET IO® / CANopen® Gateway



### Linking CANopen Devices and Networks to PROFINET IO

- PROFINET IO device (1440 bytes input and 1440 bytes output)
- CANopen manager

### CANopen Gateway easily extendable via InRailBus

- In accordance with PROFIBUS International Document TC2-09-0002 and CiA® CANopen spec. CiA 309-4
- Cable-free connection of esd CAN-CBX-I/O modules to the gateway
- InRailBus for CAN connection and power feed

### Software Tools Inclusive

- PROFINET IO configuration tool GSDML-Composer
- Additional software tools for esd CAN boards (e.g. CANreal)

### Linking PROFINET IO and CANopen

The CANopen-PN can link any PROFINET IO controller to a CANopen network.



A maximum number of 127 CANopen nodes can be connected to the gateway.

### Physical Interfaces

The CAN high speed (ISO 11898-2) compatible interface allows a maximum data-transfer rate of 1 Mbit/s. The 100 BASE-TX PROFINET IO interface is compatible to IEEE802.3 and runs at 100 Mbit/s.

The gateway is designed according to PROFIBUS International Document TC2-09-0002 (CANopen-Integration\_7012 d07\_Jul09).

The PROFINET IO interface and the CAN interface are electrically isolated.

The gateway operates as a PROFINET IO device with a maximum of 1440 bytes input data and 1440 bytes output data on the PROFINET IO bus.

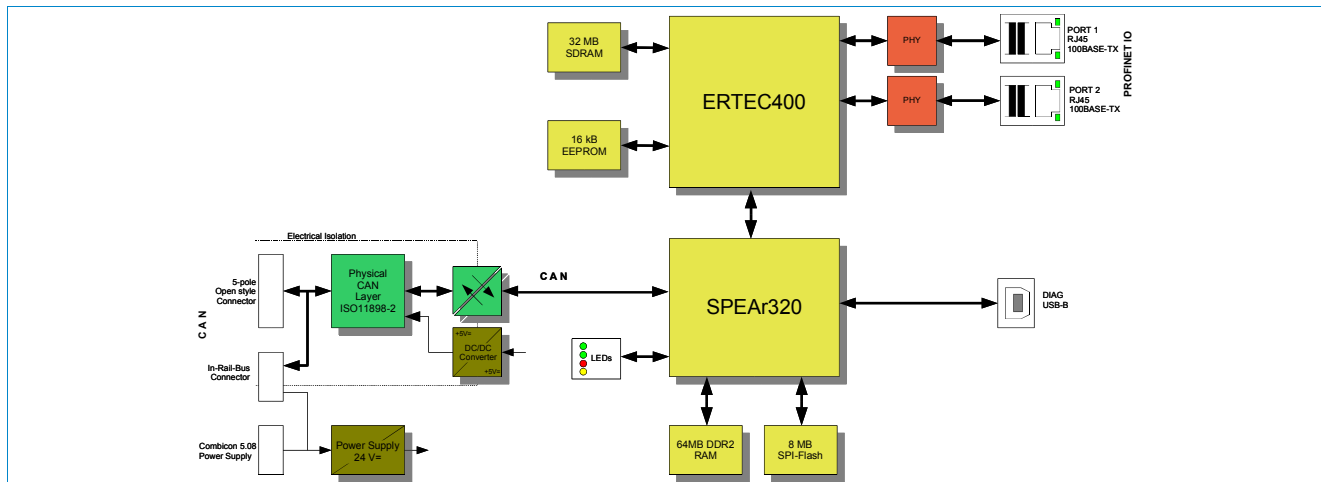
### Applications

The CANopen-PN connects CANopen modules with CANopen (CiA 301) applications to e.g. a SIMATIC-S7.

### Configuration and CAN Protocols

The module can be configured via PROFINET IO configuration tool GSDML-Composer.

The esd CAN tools (CANreal, CANplot, CANrepro, CANscript, COBview) can be used additionally for CAN diagnostics.



### Technical Specifications:

CPU (PROFINET IO):	
Microcontroller	ERTEC 400, 150 MHz
Memory	32 MB SDRAM, 16 KB EEPROM
CPU (Application):	
Microcontroller	SPEAr320S, 320 MHz
Memory	64 MB DDR2 RAM, 8 MB SPI-Flash
CAN:	
CAN controller	ISO 11898-1, integrated in SPEAr320S
CAN interface	5-pin open style 3.81 (CiA 303-1), 1 Mbit/s, ISO 11898-2, electrically isolated
PROFINET IO:	
PN controller	ERTEC 400
PN interface	2x RJ45, 100BASE-TX, 100 Mbit/s, IEEE 802.3, electrically isolated
General:	
Supply voltage	Nominal: 24 VDC / 150 mA Min./ max.: 18 VDC / 32 VDC
Ambient temperature	0 °C ... +50 °C

General (continued):	
Relative humidity	Max. 90 % (non-condensing)
Dimensions	22.5 mm x 99 mm x 114.5 mm
Weight	135 g
Connectors	CAN: 5-pin open style 3.81 (CiA 303-1) PN: 2x RJ45 Power: 4-pin CombiCon open style 5.0 or InRailBus
Order Information:	
Hardware	Order No.
CANopen-PN PROFINET IO-CANopen Gateway documentation and GSDML-Composer	C.2921.02

The software "GSDML-Composer" was developed in cooperation with the Bochum University of Applied Sciences with the kind support of the Federal Ministry of Economics and Technology.

