

CANopen-DP

PROFIBUS-DP / CANopen Gateway



- fast and reliable linking PROFIBUS-DP and CANopen networks with data buffering
- CANopen-PLC link, e.g. to SIEMENS S7-300 or S7-400
- 244 bytes input and 244 bytes output PROFIBUS data

Linking PROFIBUS-DP and CANopen

The module CANopen-DP can link any PROFIBUS-DP master to a CANopen network. The gateway operates as a PROFIBUS-DP slave-I/O component with a total of maximum 244 bytes input and 244 bytes output data. It supports cyclic (DP-V0) as well as acyclic (DP-V1) PROFIBUS data transfers.

On CANopen it operates as a CANopen manager supporting CANopen master, NMT master and configuration functions. PDO and SDO (with SDO timeout and MPDO transmission) data transfers are supported.



START frame, SYNC and Heartbeat are controlled by the module.

Applications

With the CANopen-DP gateway you can couple CANopen modules to e.g. a SIMATIC-S7.

The number of CANopen devices is not limited by the module.

Physical Interfaces

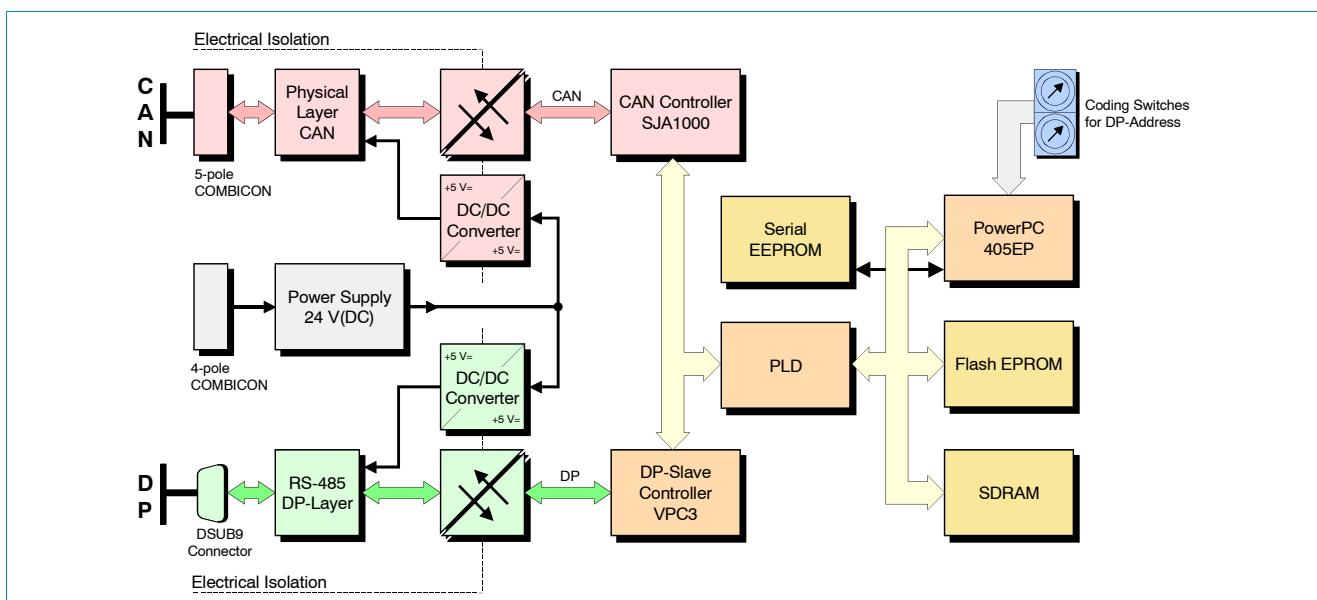
The ISO 11898-compatible CAN interface allows a maximum data-transfer rate of 1 Mbit/s. The PROFIBUS-DP-Slave interface automatically recognizes all usual bit rates up to 12 Mbit/s.

The PROFIBUS-DP as well as the CAN interface are electrically isolated.

Configuration and CAN protocols

The module can be configured via PROFIBUS configuration tool, e.g. the PLC SIMATIC Manager.

CANopen is supported as CAN-layer-7 protocol on the CAN layer. Additionally CAN-layer-2 functions are available.



Technical Specifications:

CPU:

Microcontroller: PowerPC 405 EP, 133 MHz

Memory: 4 M x 32 bit SDRAM (16 MB),
1 M x 16 bit Flash EPROM (2 MB)

CAN:

CAN controller: SJA1000, ISO 11898-1

CAN interface: differential, electrically isolated, 1 Mbit/s,
ISO 11898-2

PROFIBUS-DP:

DP controller: VPC3, DP-Slave

DP interface: RS-485, electrically isolated, max. 12 Mbit/s

General:

Operating voltage: nominal 24 VDC

Connectors: CANopen: 5-pole socket connector

DP: 9-pole female DSUB

power: 4-pole spring force connection
plug

Order information:

Designation order no.
CANopen-DP PROFIBUS-DP-CANopen gateway, C.2908.02

GSD-file
CANopen-DP-ME English user's manual C.2908.21