

CANOPEN FEATURES

| | |
|-----------------------------|--|
| Power supply | 10..40 Vdc; 19..28 Vac |
| Isolation | 1,5 kVac (3..6 way) |
| NMT | Slave |
| Error Control | Node guarding |
| Node ID | Hardware switch or software |
| PDO Modes | Event triggered, Synq (ciclico), Synq (aciclico) |
| PDO linking | Supported |
| PDO mapping | Variable |
| Error message | Yes |
| Number of SDO | 1 Server |
| Error Message | Yes |
| Supported application layer | CiA 301 v4.02 |
| Supported profile | CiA 401 v2.01 |

EDS [ELECTRONIC DATA SHEET]

Electronic Data Sheet Specification for CANopen

CiA DSP 306
Version 1.2
Date: July 2004

Application Layer and Communication Profile
CiA DS 301
Version 4.01
Date: 1 June 2000

File[Info]
FileName=ZC-16DI8DO_R01.eds
FileVersion=1
FileRevision=1
EDSVersion=4.0
Description=ZC-16DI8DO EDS FILE
CreationTime=10:30AM
CreationDate=14-02-2008
CreatedBy=SENECA s.r.l.
ModificationTime=10:30AM
ModificationDate=14-02-2008
ModifiedBy=SENECA s.r.l.

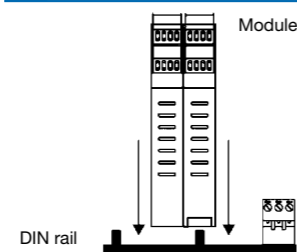
- An EDS is an ASCII file in WIN.INI format, which is used by CANopen configuration tools to allow the user to configure devices.
- EDS configuration file (compliant to CiA DS-301) for each device, available on www.seneca.it
- Import / Export EDS file by CANopen manager
- EDS describes each object dictionary entry with address (main-/sub index), parameter name, data type, access type and default value.

ORDER CODES

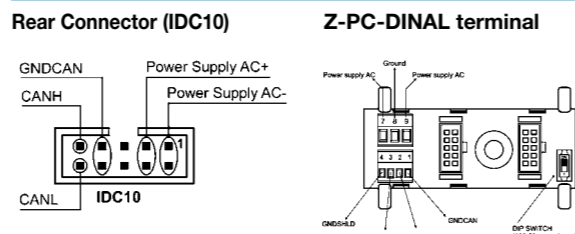
| Code | Description |
|-------------|--|
| Z-TWS-3 | Multi-function controller |
| Z-CANBUS | CAN Master interface, isolated repeater |
| ZC-107FO | CANopen fiber optic – bridge and repeater |
| ZC-24DI | 24 CH digital input module |
| ZC-24DO | 24 CH digital output module |
| ZC-16DI-8DO | 16 CH digital input – 8 CH digital output module |
| ZC-8AI | 8 CH analog input module |
| ZC-3AO | 3 CH analog output module |
| ZC-4RTD | 4 CH thermoresistance input module |

CONNECTION SYSTEM

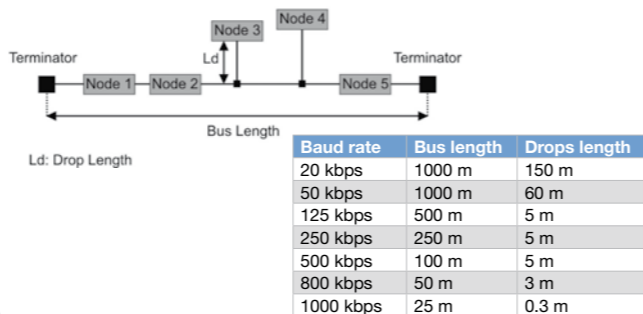
1 DIN 46277 rail installation



2 Electrical connection



3 CAN connection rules



COMMUNICATION

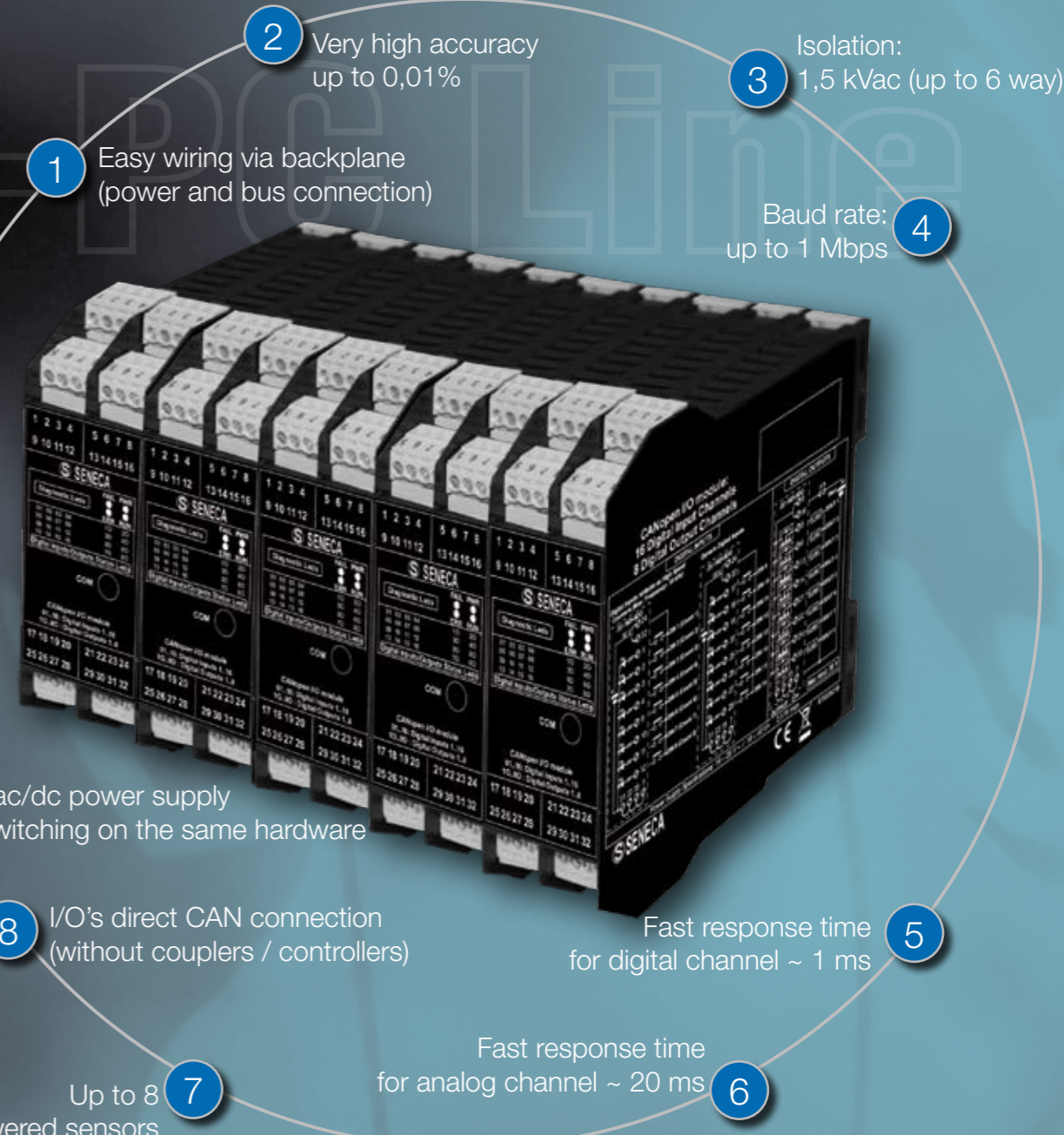
- TPDO response time to sinq: < 1ms
- Variable PDO mapping / linking performing very fast communication between slave
- Nr max nodes without repeater: 127
- Object oriented communication: by PDO and SDO messages
- Low priority (complex) services: by SDO messages
- PDO slave messages: on event or synchronized

Z-PC Line

High performance distributed I/O system



CiA 201 v. 2.01 profile



2 Very high accuracy up to 0,01%

3 Isolation: 1,5 kVac (up to 6 way)

1 Easy wiring via backplane (power and bus connection)

4 Baud rate: up to 1 Mbps

9 Vac/dc power supply switching on the same hardware

8 I/O's direct CAN connection (without couplers / controllers)

5 Fast response time for digital channel ~ 1 ms

7 Up to 8 powered sensors

6 Fast response time for analog channel ~ 20 ms



Embedded / IC production, electrical distribution, technical buildings



Automotive, materials handling, transport systems



Assembly lines, printing, bending, packaging machines



Medical industry, food&beverage processing lines

INFORMATION

Product information & EDS: www.seneca.it
Catalogs: www.seneca.it/downloads
Sales information: sales@seneca.it

Technical support: support@seneca.it
CoDeSys: www.automation-alliance.com
CANopen: www.can-cia.org



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High performance distributed I/O system

CANopen

PROGRAMMING & CONFIGURATION

- IEC 61131 programming system (CoDeSys)
- I/O modules EDS
- EASY suite (plug & play software) by RS32
- DIP switches (address, baud rate)



I/O DIGITAL MODULES

- ZC-24DI: 24 CH digital input / CANopen
- ZC-24DO: 24 CH digital output / CANopen
- ZC-16DI-8DO: 16 CH digital input / 8 CH digital output / CANopen

MODBUS / CANOPEN protocol switch

DIGITAL INPUT: IEC EN 61131-2 COMPLIANCE

COUNTERS: 32 bit, max 10 kHz

RESPONSE TIME ~ 1 ms

DIGITAL OUTPUT: MOSFET, MAX 500 mA per CHANNEL

I/O ANALOG MODULES

- ZC-8AI: 8 CH analog input / CANopen
- ZC-3AO: 3 CH analog output / CANopen
- ZC-4RTD: 4 CH RTD (P100, Ni100, Pt500, Pt1000) input / CANopen
- ZC-8TC: 8 CH Thermocouple (J,K,E,N,S,R,B,T) / CANopen
- ZC-SG: strain gauge input / CANopen

ACCURACY: UP TO 0,01%

POWER TRANSDUCERS

RESPONSE TIME ~20 ms

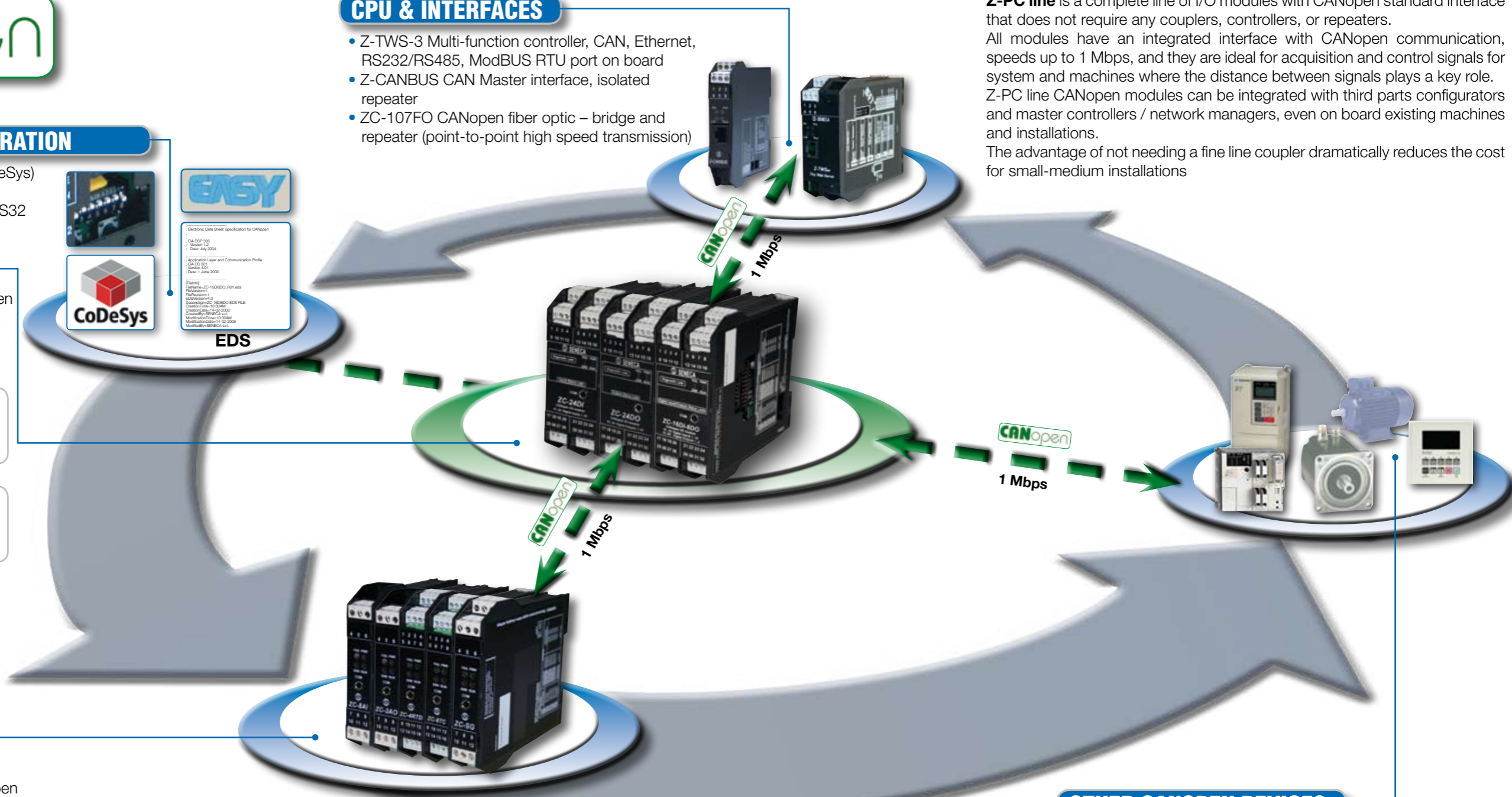
TEMPERATURE RANGE:
Pt100: -200..+650°C • Pt500: -200..+750°C
Pt1000: -200..+210°C • Ni100: -60..+250°C
TC: J,K,E,N,S,R,B,T (EN 60584-1)

CPU & INTERFACES

- Z-TWS-3 Multi-function controller, CAN, Ethernet, RS232/RS485, ModBUS RTU port on board
- Z-CANBUS CAN Master interface, isolated repeater
- ZC-107FO CANopen fiber optic – bridge and repeater (point-to-point high speed transmission)



Z-PC line is a complete line of I/O modules with CANopen standard interface that does not require any couplers, controllers, or repeaters. All modules have an integrated interface with CANopen communication, speeds up to 1 Mbps, and they are ideal for acquisition and control signals for system and machines where the distance between signals plays a key role. Z-PC line CANopen modules can be integrated with third parts configurators and master controllers / network managers, even on board existing machines and installations. The advantage of not needing a fine line coupler dramatically reduces the cost for small-medium installations



OTHER CANOPEN DEVICES

Z-PC line