

CAN-CBX-DIO8/2

CANopen® Module with 8 Digital I/O Channels



Versatile I/O Flexibility

- 8 independently programmable digital input/output ports for flexible integration
- Inputs can be configured with various functions, including edge-triggered events and counters, allowing customization for specific requirements

CANopen® Integration according to CiA® Specifications

- Robust CANopen communication according to CiA specifications
- Compatibility and interoperability with CiA 301 CANopen application layer and communication profile
- Generic I/O-module providing versatile integration capabilities with CiA 401 CANopen profile for I/O devices

Advanced 32-Bit Counter Inputs with Trigger and CAN Messaging

- Respond to specific events with edge triggered inputs
- Accurate and extended event tracking with 32-bit counters
- Efficient CAN communication triggered at preset counter values

Easy to combine with other Modules of esd's CBX Series

- E.g Modules for analog inputs or outputs



Adaptable Digital Connectivity

The CAN-CBX-DIO8/2 module is equipped with 8 flexible channels that can be assigned as inputs or outputs. It operates at a nominal voltage of 24 V and supports a maximum output current of 0.5 A at 24 V, making it suitable for various control scenarios.

High-Speed CAN Interface

The module features a High-Speed CAN interface compliant with ISO11898 standards. It offers electrical isolation and supports bit rates up to 1 Mbit/s. CANopen node number and the CAN bit rate are configured conveniently via coding switches.

Efficient I/O Integration

Within the CBX module series, the InRailBus technology offers compact industrial CAN input/output modules. These modules feature an efficient wiring concept for CAN and supply voltage and are housed in a slim design that focuses on usability.

Advanced InRailBus Integration

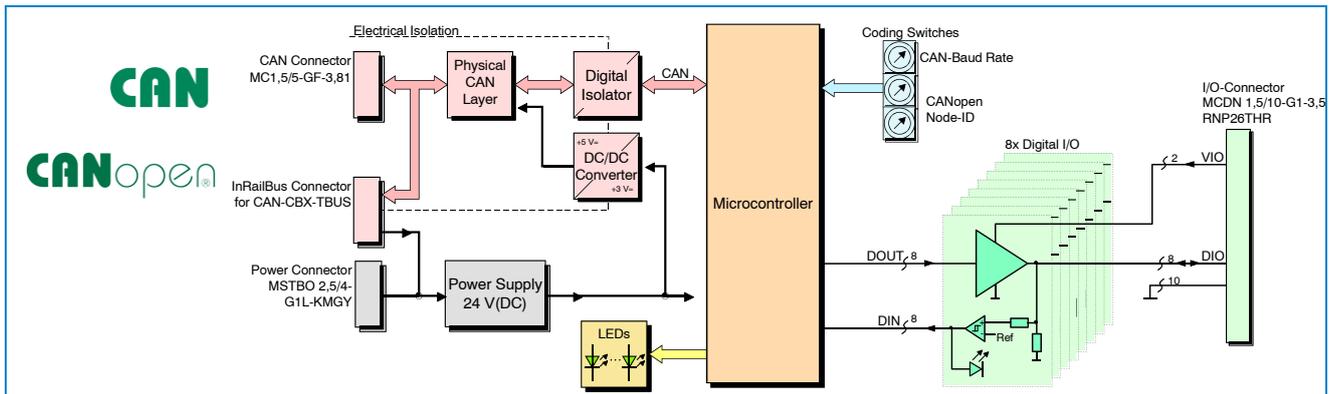
The InRailBus connector (TBUS connector) simplifies the supply of power and CAN bus signals. It is seamlessly integrated into the DIN rail for user-friendly installation. At the same time, individual modules can be removed from the InRailBus without interrupting the bus signals, which enables efficient maintenance. Alternatively, power and signals can also be connected separately via the terminal connections.

Comprehensive LED Status Display

Each channel has a dedicated LED that indicates the current I/O state, while four additional LEDs clearly visualize the status of the CANopen node and I/O errors.

Tailored Solutions upon Request

We offer customization options to meet your specific needs. For detailed information, kindly reach out to our sales team.



Technical Specifications:

Process Coupling:		General:	
Number of digital in/outputs	8 independent channels, each programmable as output or input	Power supply voltage	12 V DC ... 32 V DC / $I_{MAX,24V} = 41 \text{ mA}$
Specification of the digital inputs	Input voltage (nominal value): 24 V DC, $R_{IN} \sim 10 \text{ k}\Omega$ Input voltage is limited to VIO	Ambient temperature	-20 °C ... +70 °C
Special input functions	Level, edge, counter	Dimensions	22.5 mm x 99 mm x 114.5 mm (without connectors)
Specification of the digital outputs	High side power switches, IO Power supply (nominal): 12 ... 32 V DC, Output current (nom.): 0.5 A (70 °C, 24 V DC),	Housing	Plastic housing (ME MAX) for carrier rail mounting NS 35/7,5 DIN EN 60715
Protection circuit of outputs:	Short circuit and over temperature protection with output shutdown and auto-restart with hysteresis,	Protection class	IP20
CAN:		Connectors	Power: Phoenix MSTBO2,5/4-G1L-KMGY CAN: Phoenix MC1,5/5-GF-3.81 I/O: Phoenix MCDN 1,5/10-G1-3,5
CAN interface	Physical layer according to ISO 11898-2, electrically isolated, CAN bit rate: 10 kbit/s up to 1 Mbit/s	Weight	Approximately 125 g
Protocol	CANopen according to CiA specifications CiA 301 and CiA 401	Order Information:	
		Hardware	
		CAN-CBX-DIO8/2	CANopen module, 8 digital inputs/outputs C.3010.04
		Accessories	
		CAN-Cable-S 0.3m (plug) Cable, 0.3 m, pin contacts	C.1323.03
		CAN-CBX-TBus Mounting-rail bus connector	C.3000.01
		CAN-CBX-TBus-Connector-Socket	C.3000.02
		CAN-CBX-TBus-Connector-Plug	C.3000.03