# CAN-CBX-AI420 4 Analog Inputs, Resolution 20 Bit



4 differential inputs

- · programmable input range
- resolution 20 bit
- In-Rail-Bus
- CANopen

## Analog Inputs

The CAN-CBX-AI420 module is equipped with two precision, high throughput analog front ends with  $\Sigma\Delta$ -A/D-converters that in common offer four analog input channels. Depending on the selected sample rate and the external wiring a resolution of at least 20 bit can be achieved. The input voltage range is programmable.

## Compact I/O Module

The CAN-CBX module series with In-Rail-Bus provides industry compatible CAN bus in-/output modules in combination with service-friendly 'wiring' of CAN bus and supply voltage.

### InRailBus

The power supply and the CAN bus signals can be applied via the InRailBus connector



(TBUS-connector) integrated in the mounting rail or separately via the clampconnection.

From the InRailBus individual modules can be removed without interrupting the bus signals.

#### CAN Interface

The CAN interface is designed according to ISO11898 with electrical isolation and bit rates up to 1 Mbit/s.

The CANopen-node number and the CANbit rate can be easily set via coding switches at the top side of the module.

## LED Display

Four LEDs indicate the input state and the CANopen node state.

#### Software Support

The module comes with CANopen firmware according to CiA-DS-301 and with a CANopen I/O-profile according to CiA-DS-401.



## **Technical Specifications:**

Process coupling:	
Number of inputs:	4 analog differential inputs
Resolution:	up to 20 bits
Input range:	programmable: ±10 V
Conversion time:	16-bit p-p resolution achievable with a total conversion time of 500 μs (2 kHz channel switching)
Protection circuits:	electrical isolation by digital isolators, analog inputs overvoltage tolerant: • up to ±16.5 V not affecting adjacent channel, • up to ±50 V absolute maximum
CAN, Microcontroll	er:

Microcontroller:	MB90F497, CAN 2.0A/B
CAN interface:	acc. to ISO11898, differential, electrically isolated, bit rate up to 1 Mbit/s
Protocol	CANopen DS-301, DS-401

#### General: 0... 50 °C Ambient temp.: nominal 24 VDC, Power supply. permitted range 12...32 VDC Dimensions: 22 x 112 x 113 mm Phoenix MSTBO2,5/4-G1LKMGY Connectors: Power: CAN: Phoenix MC1,5/5-GF-3.81 Phoenix MC1,5/12-G-3,81-AU Analog. Order information: Designation order no. CAN-CBX-AI420 4 analog inputs 20 bit C.3030.02

