CM CANopen for SIMATIC® S7-1200 SPS

The Ixxat CM CANopen is a powerful CANopen interface for SIMATIC Industrial Automation Systems. It enables easy connection of any CANopen or CAN 2.0A devices to the SIMATIC S7-1200 PLC and improves the versatility and efficiency of automation systems.

The module plugs into the communication module interface of the S7-1200 and acts as a bridge between the CANopen or CAN devices and the SIMATIC base controller. In this way, system integrators can integrate a wide range of automation products into their systems and maximise development flexibility.

The CM CANopen enables the smooth transmission of CAN frames from the PLC to various devices, offering not only the CANopen and CAN 2.0A protocols but also extended programming blocks for direct processing of CAN frames. Configuration support and extensive support services are available for successful integration.

FEATURES AND BENEFITS

- Easy-to-integrate CANopen master/slave module for SIMATIC S7-1200 basic controller

- Cost-effective, scalable system expansion by connecting up to 3 CM CANopen modules per CPU and up to 16 CANopen slave devices in master mode

- LEDs provide comprehensive diagnostic information on module, network and I/O status

- Uncomplicated configuration thanks to included software and integration into the hardware catalogue of the TIA Portal configuration environment

- Support for transparent CAN 2.0A for customised protocol implementation

- Efficient PLC programming via ready-made function blocks in TIA Portal

- Easy configuration as both Master or Slave - no programming is needed

ORDER NUMBER	021620-B
Galvanic isolation	Galvanic isolation on sub-network interface
Power supply	+5 VDC +/-10 %, supplied from S7-1200 controller

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USB Interface	Mini-USB port for configuration
Serial bus interface	CANopen connection is provided via a D-Sub 9 contact
Power consumption	Max. 200 mA at 5 V
Weight	120 g
Dimensions	30 x 100 x 72 mm
Operating temperature	0 °C to +60 °C
Storage temperature	- 40 °C to +70 °C
Protection class	IP20
Relative humidity	5-95 %, non-condensing
Certification	CE, UL, cUL
Housing material	Plastic housing, DIN rail (35-7,5/15)
LED	3 x status LEDs for diagnosis, operation and error display

CERTIFICATES

ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub male to female)	1.04.0075.03000

PIN ALLOCATION

CAN CONNECTOR D-Sub 9 ❶

Pin no.	Signal
7	CAN-High
2	CAN-Low
3, 6	CAN-GND
5	Shield

TECHNICAL DRAWING
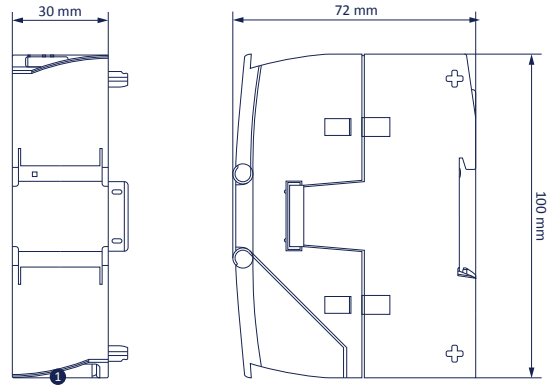
SOFTWARE SUPPORT

CANopen CONFIGURATION AND TIA PORTAL INTEGRATION

The seamless integration into the SIMATIC world is one of the most essential requirements when extending of the SIMATIC automation system with networked fieldbus equipment that is not based on either PROFIBUS or PROFINET. HMS has addressed this need enabling a seamless integration of the CM CANopen module into TIA Portal. Configuration of the connected CANopen network is intuitively performed with the included CM CANopen Configuration Studio. The software and TIA configuration files can be downloaded free of charge from ixxat.com/support.

Once the configuration is finalized, the CANopen network configuration is downloaded into the CM CANopen module via USB connection and locally stored in non-volatile memory. If one of the slave devices in the connected CANopen network has to be replaced, configuration data for this device will be downloaded automatically by the CM CANopen module once the device is reattached, significantly reducing down-times in high availability applications.

HMS