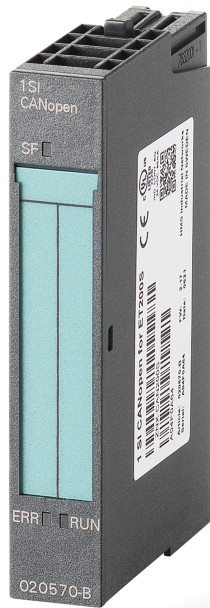


1 SI CANopen



The Ixxat 1 SI CANopen is a powerful CANopen interface for SIMATIC[®] Industrial Automation Systems. It provides a simple and cost-effective way to connect CANopen devices to SIMATIC ET200S modular I/O systems, facilitating the expansion of automation systems and increasing their efficiency.

With the help of the 1 SI CANopen module, CAN/CANopen networks can be seamlessly integrated into the system and controlled via PROFIBUS or PROFINET without being dependent on additional gateways. It 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.

The 1 SI CANopen is supported by all interface and CPU modules of the SIMATIC ET200S, with the exception of the Basic and Compact versions.

FEATURES AND BENEFITS

- Easy-to-integrate CANopen master/slave module for the SIMATIC ET200S modular I/O system
- Cost-effective, scalable system expansion by connecting up to 126 CANopen slave nodes in master mode
- Supports stand-alone operation of SIMATIC ET200S
- Minimization of downtimes thanks to hot swapping option (replacement of modules during operation)
- Isochronous operation mode supports efficient real-time communication
- Uncomplicated configuration thanks to integration into the hardware catalogue of the SIMATIC STEP 7 or TIA Portal configuration environment
- Efficient PLC programming via ready-made function blocks in STEP 7
- Support for transparent CAN 2.0A for customised protocol implementation

ORDER NUMBER	020570-B
CAN bit rates	20 kbit/s - 1 Mbit/s
Galvanic isolation	Galvanic isolation on sub-network interface
Power supply	+24 VDC +20/-15 %, supplied from Power module PM-E
Power consumption at 24 V	Max. 0.8 W, 33 mA

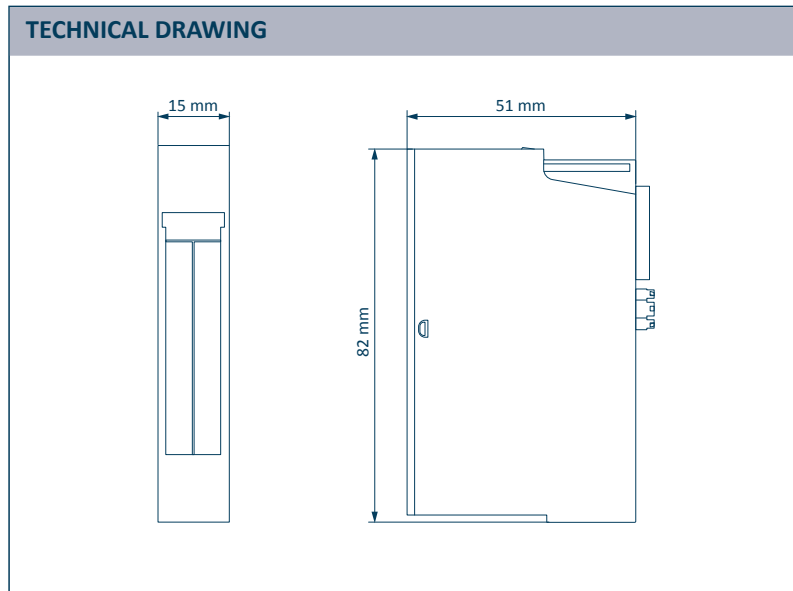
ORDER NUMBER	020570-B
Weight	40 g
Dimensions	15 x 82 x 51 mm
Operating temperature	0 °C to +60 °C
Storage temperature	-40 °C to +70 °C
Protection class	IP20
Relative humidity	5 to 95 %, non condensing
Certification	CE, UL, cUL, ROHS
Housing material	Plastic housing, plug-in module
LED	3 x status LEDs for diagnosis, operation and error display



PIN ALLOCATION

No.	Name	Description
1	L	CAN_L, low level in CANopen communication
2	SHLD	Shield, provides connections to the CANopen network shield
5	H	CAN_H, high level in CANopen communication
6	GND	Ground, provides connections to the CANopen network shield
3, 4, 7, 8	N.C.	Not connected ^a

a To ensure backwards compatibility, these contacts should not be connected



CANopen configuration and TIA Portal integration

Easy 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 1 SI CANopen module into either SIMATIC STEP 7 or TIA Portal. Configuration of the connected CANopen network is intuitively performed with the optional Anybus Configuration Manager - CANopen.

Once the configuration is finalized, the CANopen network configuration may be uploaded to and stored in the PROFIBUS or PROFINET PLC or the ET200S I/O system CPU. If a 1 SI CANopen module has to be replaced, the previously stored configuration can be downloaded from the PLC to the new module, significantly reducing down-times in high availability applications. 1 SI CANopen modules may be replaced while the ET200S is powered.