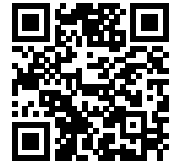# CX2500-M510 | Fieldbus master module CANopen for CX20xx, CX52x0, CX53x0, CX56x0

ℹ Product status: regular delivery

The CX2500-Mxxx fieldbus master modules are left-sided attachments for the Embedded PC series CX20xx, CX52x0, CX53x0 and CX56x0. The use of systems with fieldbus master modules enables the segment-like construction of control structures in extensive plants and machines using further fieldbus components (Bus Couplers, Bus Terminal Controllers, Drive Technology, etc.).

The CX2500-M510 fieldbus master module assumes the function of a CANopen master. Each module occupies a PCI Express® lane, so that a total of four modules can be connected in any desired combination to the left side of a CX20xx group. Compared with the Beckhoff PCIe® Fieldbus Cards, the technical data of the fieldbus master modules are almost identical, but with single channels.

The parallel operation of several identical or different masters is possible, e.g. two PROFIBUS masters or a PROFIBUS master and a CANopen master. In the case of mixed operation of master and slave connections, CX systems act as intelligent gateways between different fieldbuses: data are received, processed and fed into other fieldbuses. Master or slave connections network several CX systems with one another strictly deterministically via the fieldbus level. CX fieldbus modules can be retrofitted/exchanged by adding them to existing CX systems. The scanning and recognizing of the modules, the parameterization, the configuration of the connected I/O components and the online diagnostics of the process/fieldbus status take place in the TwinCAT System Manager.

Product information

Technical data

Technical data	CX2500-M510
Fieldbus	CANopen

Data transfer rates	10, 20, 50, 100, 125, 250, 500, 800, 1000 kbaud
Bus interface	1 x D-sub socket, 9-pin
Bus device	max. 127 slaves
Interface to the CPU	PCI Express®
Max. power loss	2.8 W
Properties	CANopen – supported PD communication types: event driven, time-controlled, synchronous, polling; emergency message handling, guarding and heartbeat, boot-up according to DS302, Online Bus Load Monitor and Bus Trace, the error management for each user is freely configurable.
Dimensions (W x H x D)	24 mm x 99 mm x 54.5 mm
Weight	approx. 180 g
Operating temperature	-25...+60°C
Storage temperature	-40...+85°C
Relative humidity	95%, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protection rating	IP20

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