

Your Global Automation Partner

TURCK

TBEN-S2-2COM-4DXP

Multiprotocol I/O Module with Serial Interfaces



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Whether retrofit or new projects, RS232, RS485 or Modbus RTU – serial interfaces still play an important role in industrial automation.

Turck's TBEN-S2-COM block I/O module integrates devices with serial interfaces directly in the field and connects them to modern industrial Ethernet networks. Data can be transferred not only to higher-level controllers but also parallel to IT systems such as edge gateways, data hubs or cloud systems via Modbus TCP.



TBEN-S2-2COM-4DXP

- Ultra Compact: 32 × 144 mm
- Wide temperature range -40...+70 °C
- Robust: IP65, IP67, IP69K, fully potted
- M8-24-V supply for line topologies
- M8 Ethernet switch for line topologies
- PROFINET, EtherNet/IP, Modbus TCP
- Media redundancy, MRP, DLR
- Topology identification, LLDP

Two serial interfaces

- M12 round connectors
- RS232 or RS485
- Integrated Modbus RTU function
- Integrated power supply for devices with 5 V or 24 V

Four universal digital channels

- Two channels per port
- Can be used without any configuration as input or output
- PNP circuitry



Ethernet multiprotocol

Each module can speak PROFINET, EtherNet/IP™ or Modbus TCP. The module automatically recognizes the bus protocol during the start-up phase. This reduces the number of device variants required and makes it possible to operate a machine with different control systems.



ARGEE FLC(Field Logic Controller)

With the web-based engineering environment ARGEE, Turck's block I/Os become compact controllers (Field Logic Controller, FLC). These FLCs relieve the central PLC by decentralized pre-processing or execute smaller control Tasks without any higher level control.



Identification of objects using bar codes

- Efficient identification solution
- Fast field wiring, power is supplied via the serial M12 interface.
- Direct fieldbus connection



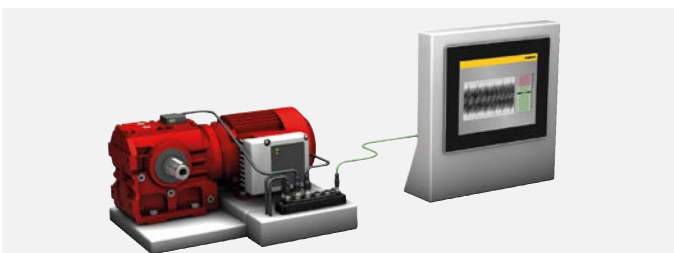
Error-free commissioning thanks to Pick-to-Light

- Economic Pick-to-Light solution
- Scalable with up to 64 sensors per TBEN-S module
- Fast wiring
- Easy programming through integrated Modbus RTU function



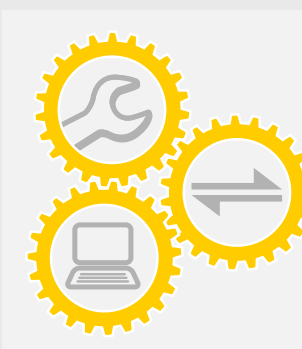
Measurement and detection of objects

- Reliable measurement of objects
- Easy connection even of large light screens directly in the field
- Easy programming through integrated Modbus RTU function



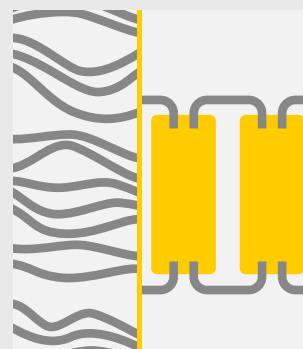
Motor control with vibration monitoring

- Efficient motor control
- Plannable machine downtimes
- Higher system availability
- Reduction of maintenance costs



Configuration vs. Programming









Integrating Modbus RTU has never been easier. Both serial COM ports can be operated as Modbus RTU clients. Only addresses and process data areas have to be configured. The module then takes over the protocol processing.



Easy wiring in the field

True to the motto "Getting out of the control cabinet", Turck's block I/O modules in IP67 can be mounted close to the signals, directly on the machine. In contrast to parallel wiring, only one supply and one data line is required for this purpose, which are continued in line topology.

Types and Features

	Type code	Description
	TBEN-S2-2COM-4DXP	Multiprotocol Ethernet block-I/O module with two serial interfaces
	IVU2TB*	iVu BCR camera-based barcode reader from Banner Engineering with serial interface
	EA5R*MOD*	EZ-Array measuring light screens with Modbus RTU interface from Banner Engineering
	K50FF*S1*	K50 optical Pick-to-Light sensors with Modbus RTU interface from Banner Engineering
	QM42VT2*	QM42VT vibration and temperature measuring sensors with Modbus interface from Banner Engineering
	RSE57-TR2/RFID	Terminating resistor to build a bus line topology for RS485 and RFID
	VT2-FKM5-FKM5-FSM5	T-splitter to build a bus line topology for RS485 and RFID
	VB2-FKM5-FSM5.205-FSM5.305/S2550	T-splitter for re-feeding a supply voltage to the bus line topology for RS485 and RFID

*Additional accessories and the necessary connecting cables are listed in the following documents:
 Accessories list of block I/O device series TBEN-S: D301367
 Connectivity Preferred Program 10000122

Over 30 subsidiaries and
60 representatives worldwide!

