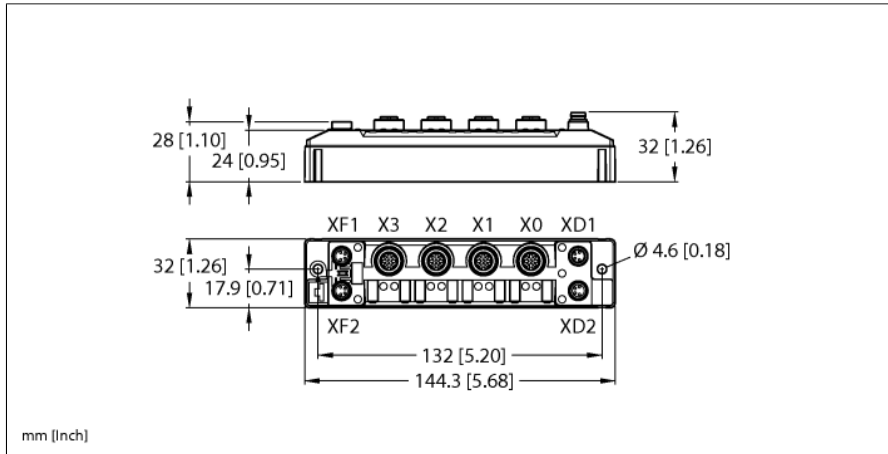


# Compact RFID Module for EtherCAT 4 RFID Channels (HF/UHF) TBEC-S2-4RFID

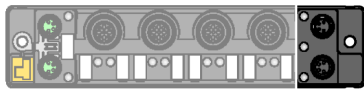


Type	TBEC-S2-4RFID
ID	100014935
<b>Supply</b>	
Supply voltage	24 VDC
Admissible range	18...30 VDC total current max. 4 A per voltage group
Operating current	V1: max. 120 mA
RFID supply $V_{AUX1}$	Slots X0...X3 from V1 short-circuit proof, 2 A $\leq$ 70 °C per channel, total current for RFID supply max. 3.8 A
Electrical isolation	galvanic isolation of the voltage groups V1 and V2, voltages up to 500 VAC
Power dissipation, typical	$\leq$ 5 W
<b>System data</b>	
Fieldbus connection technology	2 $\times$ M8, 4-pin, A-coded
Service interface	EoE via XF1 or XF2
<b>EtherCAT</b>	
CAN over EtherCAT	acc. to modular device profile (ETG.5001.1)
Diagnostics	CoE Emergencies, DiagnosisHistory
Address allocation	Automatic/Configured Station Alias
<b>RFID</b>	
Number of channels	4
Connectivity	M12
Power supply	2 A per channel at 70 °C, short-circuit proof, total current for RFID supply max. 3.8 A
Operation per channel	1 $\times$ HF or UHF read/write head, up to 32 $\times$ bus-compatible HF read/write heads with ending /C53 (additional power supply may be needed)
RFID data interface	HF und UHF
Cable length	Max. 50 m

- EtherCAT device acc. to Modular Device Profile
- Glass fiber reinforced housing
- Shock and vibration tested
- Fully potted module electronics
- Protection classes IP65, IP67, IP69K
- ATEX zone 2/22
- CCC-Ex
- Up to 128 bytes of user data per read/write cycle per channel as well as the use of fragments with 16 kilobytes of FIFO memory each
- Data interface for convenient use of the RFID functions
- Continuous HF bus mode with up to 32 HF read/write heads per channel
- 4 channels with M12 connection for RFID

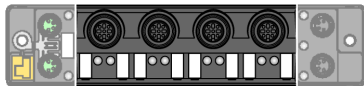
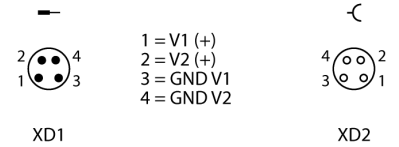
Standard/Directive conformity	
Vibration test	Acc. to EN 60068-2-6 Acceleration up to 20 g
Shock test	acc. to EN 60068-2-27
Drop and topple	acc. to EN 60068-2-31/IEC 60068-2-32
Electromagnetic compatibility	Acc. to EN 61131-2
Approvals and certificates	CE UKCA ATEX zone 2/22 CCC-Ex FCC statement, UV resistant acc. to DIN EN ISO 4892-2A (2013)
UL Certificate	cULus LISTED 21 W2, Encl.Type 1 IND.CONT.EQ.
Note on ATEX/IECEx	The Quick Start Guide with information on use in Ex areas must be observed.

General Information	
Dimensions (W x L x H)	32 x 144 x 32 mm
Ambient temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Altitude	Max. 5000 m
Protection class	IP65 IP67 IP69K
MTTF	234 years acc. to SN 29500 (Ed. 99) 20 °C
Housing material	PA6-GF30
Housing color	Black
Connector material	Nickel-plated brass
Material label	Polycarbonate
Halogen-free	yes
Mounting	2 mounting holes, Ø 4.6 mm



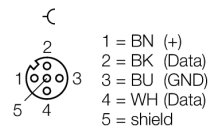
**Note**  
 Power supply cable (example):  
 M8-M8  
 ID 6627044 PKG4M-0.2-PSG4M/TXL  
 ID 6626679 PKG4M-4-PSG4M/TXL

M8 × 1 power supply

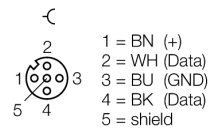


**Note**  
 RFID cable (example):  
 RK4.5T-5-RS4.5T/S2500  
 ID 6699201  
 Connection of TB and TN read/write heads (example):  
 TN-CK40-H1147  
 ID 7030006

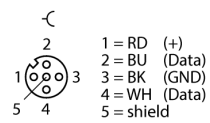
.../S2500 connectors



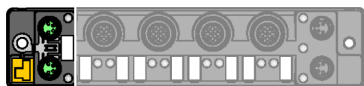
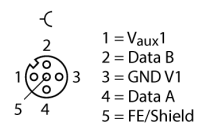
.../S2501 connectors



.../S2503 connectors



Wiring diagram



**Note**  
 We strongly recommend only using ready-made Ethernet cables!  
 Ethernet cable (example):  
 M8-M8:  
 ID 6630376 PSG4M-0.2-PSG4M/TXN  
 ID 6934033 PSGS4M-PSGS4M-4416-1M  
 M8-RJ45:  
 ID 6935342 PSGS4M-RJ45S-4416-1M  
 M8-M12:  
 ID 6935351 RSSD-PSGS4M-4416-2M

M8 × 1 Ethernet

