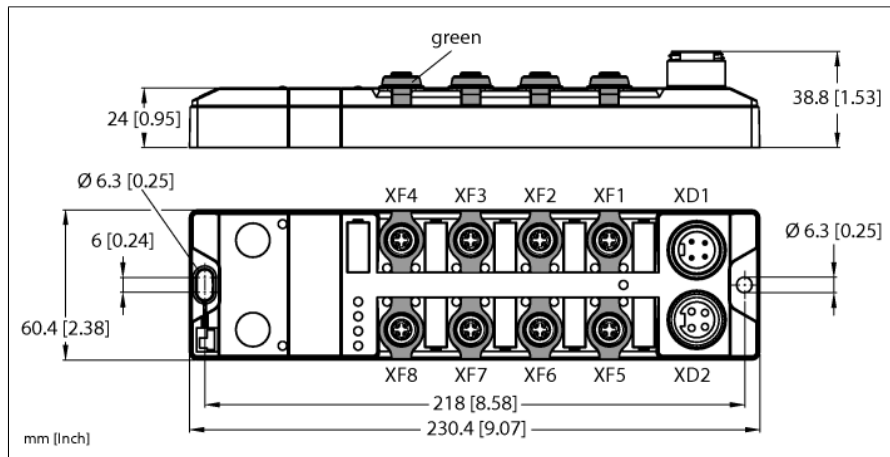


# Unmanaged Ethernet Switch

## 8 × 100-Mbit Ports

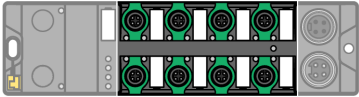
### TBEN-L4-SE-U1



|                                    |                                                                            |
|------------------------------------|----------------------------------------------------------------------------|
| Type                               | TBEN-L4-SE-U1                                                              |
| ID                                 | 100028460                                                                  |
| Supply                             |                                                                            |
| Supply voltage                     | 24 VDC                                                                     |
| Admissible range                   | 8...30 VDC                                                                 |
|                                    | Load dump protection at 12 V                                               |
| Voltage supply connection          | 7/8", 4-pin                                                                |
| Electrical isolation               | galvanic isolation of the voltage groups V1 and V2, voltages up to 500 VAC |
| Power dissipation, typical         | ≤ 2.9 W                                                                    |
| System data                        |                                                                            |
| Transmission rate Ethernet         | 10/100 Mbps                                                                |
| Connection technology Ethernet     | 8 × M12, 4-pin, D-coded                                                    |
| Web server                         | Default: 192.168.1.254                                                     |
| Frame forwarding                   | store and forward                                                          |
| Switch interface                   |                                                                            |
| 10/100-Mbit ports                  | 8                                                                          |
| 802.3ab compliance                 | No                                                                         |
| 802.3q compliance                  | Yes                                                                        |
| 802.3u compliance                  | Yes                                                                        |
| 802.3x compliance                  | Yes                                                                        |
| Auto-crossing (802.3)              | Yes                                                                        |
| Auto-negotiation (802.3)           | Yes                                                                        |
| Auto-polarity (802.3)              | Yes                                                                        |
| Cable test                         | No                                                                         |
| Flow control (802.3X)              | Yes                                                                        |
| Jumbo frames                       | Yes, up to 10,240 bytes                                                    |
| Multiple queues per port           | Yes, max. 8                                                                |
| QoS port prioritization (802.1D/p) | No                                                                         |

- 8 × M12, 4-pin, D-coded, 100 Mbps
- Glass fiber reinforced housing
- Shock and vibration tested
- Fully potted module electronics
- Protection classes IP65, IP67, IP69K
- 7/8" males, 4-pin, for power supply
- Separated power groups for safety shut-down
- ATEX zone 2/22
- CCC-Ex

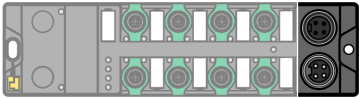
|                               |                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------|
| Standard/Directive conformity |                                                                                          |
| Vibration test                | Acc. to EN 60068-2-6<br>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<br>UKCA<br>ATEX zone 2/22<br>CCC-Ex<br>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)        | 60.4 x 230.4 x 38.8 mm                                                                   |
| Ambient temperature           | -40...+70 °C                                                                             |
| Storage temperature           | -40...+85 °C                                                                             |
| Altitude                      | Max. 5000 m                                                                              |
| Protection class              | IP65<br>IP67<br>IP69K                                                                    |
| MTTF                          | 284 years acc. to SN 29500 (Ed. 99) 20 °C                                                |
| Housing material              | PA6-GF30                                                                                 |
| Housing color                 | Black                                                                                    |
| Connector material            | Nickel-plated brass                                                                      |
| Window material               | Lexan                                                                                    |
| Material screw                | 303 stainless steel                                                                      |
| Material label                | Polycarbonate                                                                            |
| Halogen-free                  | yes                                                                                      |
| Mounting                      | 2 mounting holes □ 6.3 mm                                                                |



Ethernet M12 × 1

1 = TX +  
2 = RX +  
3 = TX -  
4 = RX -  
flange = FE

XF1...XF8



7/8" power cable

1 = 24 VDC V2  
2 = 24 VDC V1  
3 = GND V1  
4 = GND V2

1 = 24 VDC V2  
2 = 24 VDC V1  
3 = GND V1  
4 = GND V2

X1 X2