

Your Global Automation Partner

# TURCK

## TBEN-Lx-EN1 Ethernet Spanner



### Tool for Networked Worlds

Turck's TBEN-Lx-EN1 spanner is a block I/O module that enables communication between two different Ethernet networks directly in the field. The robust module with protection class to IP65/IP67/IP69K features a glass fiber reinforced housing and fully potted module electronics.

Thanks to its high degree of protection, the TBEN-Lx-EN1 is the first spanner module that can be used directly in the field without the need for additional control cabinets. This benefits the user by eliminating the need for cables to the control cabinets and ensuring a straightforward installation. The bidirectional data exchange from master to master guarantees simple communication between controllers.

The TBEN-L spanner supports Turck's multiprotocol technology and thus enables communication in EtherNet/IP, Modbus TCP and PROFINET networks. This also enables use as a protocol converter between Ethernet protocols. For an optimum connection between the different networks, two separate, electrically isolated Ethernet interfaces and the NAT (Network Address Translation) router function for up to five IP addresses are provided.

Turck's new TBEN-L spanner is another tool in the automation specialist's Industry 4.0 offering. Instead of only enabling exchange between digital I/Os and mapping the data flow at a different location, the spanner enables data exchange, where it actually takes place: directly in the field.

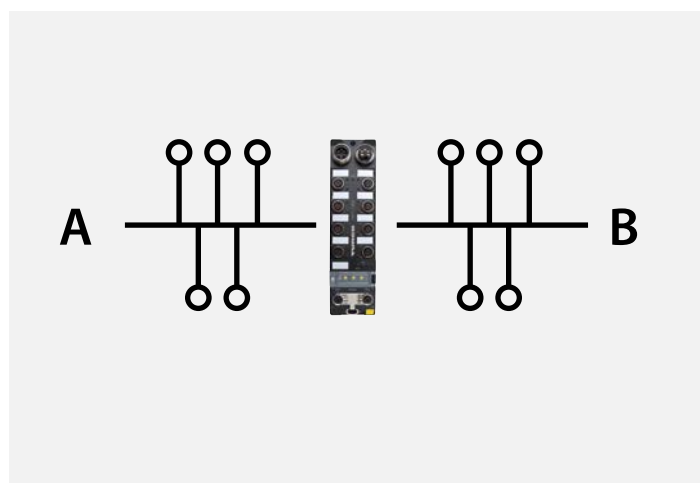
### Benefits

- Networking of different control worlds through multiprotocol Ethernet with PROFINET, EtherNet/IP and Modbus TCP
- Efficient communication from master to master in real time via process images
- Simple IP address management through integrated NAT function (Network Address Translation)
- Fast and robust wiring directly in the field and without control cabinet

# Ethernet Spanner

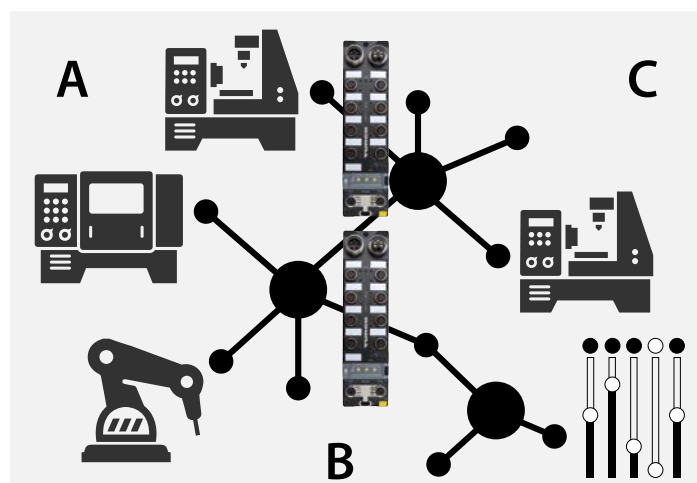
- Two separate, electrically isolated Ethernet interfaces
- Bidirectional data exchange between two networks, 256 bytes
- Protocol conversion between EtherNet/IP, Modbus TCP and PROFINET
- 1:1 NAT router
- Integrated Ethernet switch
- 10 Mbps/100 Mbps
- Glass fiber reinforced housing
- Shock and vibration tested
- Fully potted module electronics
- Protection class IP65/IP67/IP69K
- 16 digital inputs
- Input diagnostics per port

## Cross-manufacturer connection



- Integration of different components and protocols into existing structures
- No additional cables nor wiring between cabinets needed, thanks to data exchange directly via bus cable
- Simplified network structures, thanks to multiprotocol communication between components of different manufacturers

## Cross-networks communication



- Simultaneous transfer of product and production data
- Branching of the signal and data flow in production lines in terms of industry 4.0
- No coordination of manufacture specific IP addresses required thanks to NAT router function

