TBEN-S – Types and Features

TBEN-S1: 8 x M8 I/O-Ports	TBEN-S2: 4 x M12 I/O-Ports	Ident-no.	Type code	Description
		6814020	TBEN-S1-8DIP	8 digital inputs, PNP Input group diagnostics
		6814034	TBEN-S1-8DIP-D	8 digital inputs, PNP Input diagnostics per channel
		6814021	TBEN-S1-4DIP-4DOP	4 digital inputs, PNP and 4 digital outputs 2 A, PNP
		6814022	TBEN-S1-8DOP	8 digital outputs 0.5 A, PNP
		6814023	TBEN-S1-8DXP	8 universal digital channels, 0.5 A, PNP
		6814073	TBEN-S2-8DIP	8 digital inputs, PNP Input group diagnostics
		6814076	TBEN-S2-8DXP	8 universal digital channels, 0.5 A, PNP
		6814025	TBEN-S2-4AI	4 analog inputs, U, I, RTD or TC selectable per channel
		6814028	TBEN-S2-4AO	4 analog outputs, U or I selectable per channel
		6814024	TBEN-S2-4IOL	4 IO-Link master channels and 4 universal digital channels, 0.5 A, PNP
		6814031	TBEN-S2-2COM-4DXP	2 serial interfaces and 4 universal digital channels, 0.5 A, PNP

Spacer	Ident-no.	Type code	Description
	6814040	TBNN-S0-DRS-01	Spacer for TBEN-S composite on DIN rail, 1 item per unit
	6814041	TBNN-S0-DRS-05	Spacer for TBEN-S composite on DIN rail, 5 items per unit
	6814042	TBNN-S0-DRS-10	Spacer for TBEN-S composite on DIN rail, 10 items per unit
	6814043	TBNN-S0-STD-01	Spacer for TBEN-S composite on mounting panel, 1 item per unit
	6814044	TBNN-S0-STD-05	Spacer for TBEN-S composite on mounting panel, 5 items per unit
	6814045	TBNN-S0-STD-10	Spacer for TBEN-S composite on mounting panel, 10 items per unit

Ethernet cables	Type code	Description
	PSGS4M-PSGS4M-4414-xM	M8 male to M8 male
	RSSD-PSGS4M-4414-xM	M12 male to M8 male
	PSGS4M-RJ45S-4414-xM	M8 male to RJ45 male
	PSGS4M-4414-xM	M8 male to open end
	PSGS4M-0,2-PSGS4M/TXN	M8 Ethernet bridge for TBEN-S composite

x = Length in meters, variants on request

Power supply	Type code	Description
	PKG4M-x-PSG4M/TXL	M8 female straight to M8 male straight
	PKW4M-x-PSG4M/TXL	M8 female angled to M8 male straight
	PKG4M-x-PSW4M/TXL	M8 female straight to M8 male angled
	PKW4M-x-PSW4M/TXL	M8 female angled to M8 male angled
	PKG4M-x/TXL	M8 female straight to open end
	PKW4M-x/TXL	M8 female angled to open end
	8MBM8-4P2-7/8-M	Power distribution module, 1 x 7/8" male to 8 x M8 female
	PKG4M-0,2-PSG4M/TXL	M8 Ethernet bridge for TBEN-S composite

x = Length in meters, variants on request
More accessories can be found on www.turck.com

28 subsidiaries and over
60 representations worldwide!

www.turck.com

Your Global Automation Partner

TBEN-S
Ultra-Compact
Multiprotocol I/O Modules

Ultra-Compact Multiprotocol I/O Modules in IP67

Your advantages

The ultra compact TBEN-S block I/O modules are the smallest multiprotocol Ethernet block I/O modules on the market.

- Multiprotocol: one module, three protocols
- Extended temperature range -40…+70 °C
- High degree of protection IP65, IP67 and IP69K
- Ultra-compact design (32 x 144 x 31 mm)
- Lightweight construction
- Easily mounted
- Two M8 connectors for Ethernet
- Consistent diagnostics concept
- Easily configured
- Web server integrated in each module
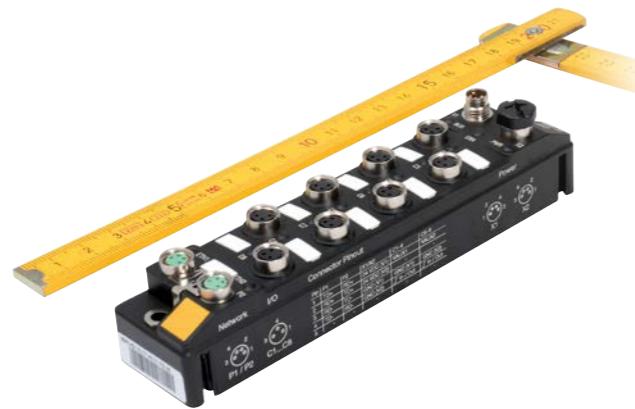
Digital I/O modules

The TBEN-S product series includes digital modules in 8 x M8 and 4 x M12 connection technology.

- Digital inputs with channel or group diagnosis
- Digital outputs 0.5 A or 2 A
- Field Logic Controller (FLC) programmable with ARGEE
- Extended Functions: Counter, PWM, Impulse Stretching, Latched Inputs

TBEN-S1 -8DXP

TBEN-S2 -4AO

1:1 scale

IP65 — DEGREE OF PROTECTION

IP67 — DEGREE OF PROTECTION

IP69K — DEGREE OF PROTECTION

Four analog inputs

- One universal module for all signals
- Current, voltage, RTD or thermocouple selectable for each channel

Four analog outputs

- One universal module for all signals
- Current or voltage selectable for each channel

IO-Link master

The 4-channel IO-Link master is the new link for digital communication, covering the "last meter" to the sensor or field level. Easy integration of IO-Link devices such as:
- Sensors and field devices
- I/O hubs (digital passive junction box)
- Valve manifolds

2 serial ports

- RS232 and RS485 per interface selectable
- Integrated Modbus RTU master
- In addition four universal digital inputs/ outputs

Easily mounted

- Very compact design: 32 x 144 mm
- Two M4 holes in line
- Lightweight construction
- Variable grounding concept

TBEN-S composite

To simplify assembly TBEN-S modules can be combined into one compact unit
- Spacer for panel mounting or DIN rail
- Matched bridges for Ethernet and supply

IO-Link

Multiprotocol
All Turck multiprotocol I/O modules can be run "out of the box" in the Ethernet systems PROFINET, Ether-Net/IP™ and Modbus TCP. Thus, you can operate a machine with a single I/O level at different control systems.
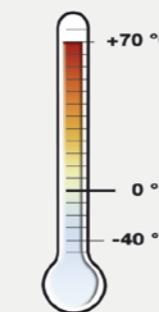
Harsh environmental conditions
The TBEN-S product series is designed for use in harsh industrial environments. These include the extended temperature range of -40…+70 °C and the high degree of protection IP65, IP67 and IP69K.

+70 °C
0 °C
-40 °C

FDT/DTM configuration
The DTM of the TBEN-S I/O modules can optionally be used in conjunction with PACTware or other FDT frame applications for configuration. In addition to parameterization and diagnostics the tool is very helpful for commissioning. With the graphical user interface you can read and simulate process data without using a control.

Web server
The on-board web server supports during commissioning, maintenance and diagnostics. Settings such as the IP address or PROFINET name can be adjusted without additional tools. The web server clearly displays diagnoses and general system information in plaintext.