

BEEP Ethernet Protocol for I/O Modules



One IP address for 33 I/O modules

With the "Backplane Ethernet Extension Protocol", BEEP in short, Turck is simplifying the application of its multi-protocol block I/O modules TBEN and FEN20. BEEP allows connecting networks with up to 33 TBEN modules (1 master, 32 slaves) and up to 480 bytes of data to the PLC over a single IP address in PROFINET, EtherNet/IP and Modbus TCP networks. By reducing the number of IP addresses, the user can connect I/O networks with high density to cost-effective control systems in no time at all.

Using the integrated web server, the user defines the first device in the line as BEEP master. The master scans the connected network and automatically configures the data assignment to all connected modules. Since all parameters of the device configuration are stored in the master, BEEP

additionally supports rapid exchange of individual modules, reducing downtimes and costs. The BEEP master detects a new device automatically and downloads the corresponding parameters.

BEEP is available on all IP67-TBEN multi-protocol modules with digital I/O signals of the L and S series as well as on Turck's FEN20 modules and compatible with all standard Ethernet components.

Your Benefits

- Easy handling by merging IP addresses
- Optimized service through drop-in replacement of slaves
- Cost savings due to fewer connections
- Can be activated free of charge on each multi-protocol module of the TBEN and FEN series

BEEP - Ethernet Protocol for I/O Modules

With BEEP, up to 33 devices (1 master and 32 slaves) or 480 data bytes can be displayed as a single device with only one IP address and a connection to the control panel. That way, the user can also take advantage of a more cost-effective PLC which supports fewer connections.

No special hardware or software is required to use BEEP. The protocol works with standard Ethernet components.



These I/O modules are available with BEEP

Ident-no.	Type code	Description
6814085	TBEN-L5-16DIP	IP67 multi-protocol Ethernet block I/O module, 16 PNP inputs, M12
6814087	TBEN-L5-16DOP	IP67 multi-protocol Ethernet block I/O module, 16 PNP outputs, M12
6814088	TBEN-L5-16DXP	IP67 multi-protocol Ethernet block I/O module, 16 universal PNP inputs or outputs, M12
6814086	TBEN-L5-8DIP-8DOP	IP67 multi-protocol Ethernet block I/O module, 8 PNP inputs, 8 PNP outputs, M12
6814009	TBEN-L4-16DIP	IP67 multi-protocol Ethernet block I/O module, 16 PNP inputs, M12
6814011	TBEN-L4-16DOP	IP67 multi-protocol Ethernet block I/O module, 16 PNP outputs, M12
6814012	TBEN-L4-16DXP	IP67 multi-protocol Ethernet block I/O module, 16 universal PNP inputs or outputs, M12
6814010	TBEN-L4-8DIP-8DOP	IP67 multi-protocol Ethernet block I/O module, 8 PNP inputs, 8 PNP outputs, M12
6814061	TBEN-L4-16DIN	IP67 multi-protocol Ethernet block I/O module, 16 NPN inputs, M12
6814063	TBEN-L4-16DON	IP67 multi-protocol Ethernet block I/O module, 16 NPN outputs, M12
6814064	TBEN-L4-16DXN	IP67 multi-protocol Ethernet block I/O module, 16 universal NPN inputs or outputs, M12
6814020	TBEN-S1-8DIP	IP67 multi-protocol Ethernet block I/O module, 8 PNP inputs, M8
6814034	TBEN-S1-8DIP-D	IP67 multi-protocol Ethernet block I/O module, 8 PNP inputs, single-channel diagnostics, M8
6814022	TBEN-S1-8DOP	IP67 multi-protocol Ethernet block I/O module, 8 PNP outputs, M8
6814023	TBEN-S1-8DXP	IP67 multi-protocol Ethernet block I/O module, 8 universal PNP inputs or outputs, M8
6814021	TBEN-S1-4DIP-4DOP	IP67 multi-protocol Ethernet block I/O module, 4 PNP inputs, 4 PNP outputs, M8
6814073	TBEN-S2-8DIP	IP67 multi-protocol Ethernet block I/O module, 8 PNP inputs, M12
6814076	TBEN-S2-8DXP	IP67 multi-protocol Ethernet block I/O module, 8 universal PNP inputs or outputs, M12
6931090	FEN20-4DIP-4DXP	IP20 multi-protocol Ethernet block I/O module, 4 PNP inputs, 4 universal PNP inputs or outputs
6814129	FEN20-4DIN-4DXN	IP20 multi-protocol Ethernet block I/O module, 4 NPN inputs, 4 universal NPN inputs or outputs

