

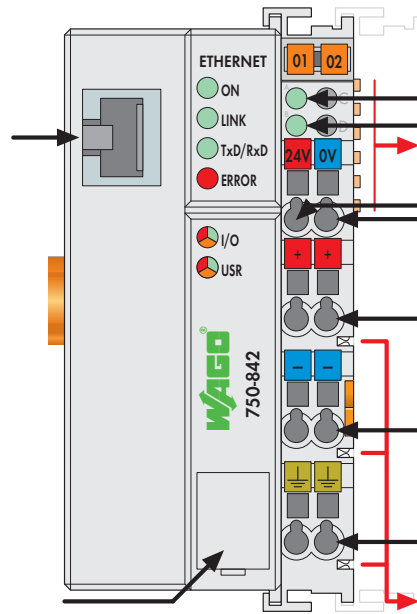
# ETHERNET TCP/IP Programmable Fieldbus Controller

10 Mbits/s; digital and analog signals



Fieldbus connection RJ-45

Configuration and programming interface



Status voltage supply  
-System  
-Power jumper contacts  
Data contacts

Supply  
24 V  
0 V

Supply via power jumper contacts  
24 V

0 V

Power jumper contacts

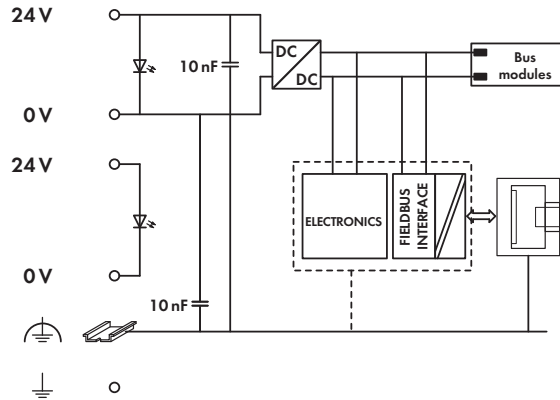
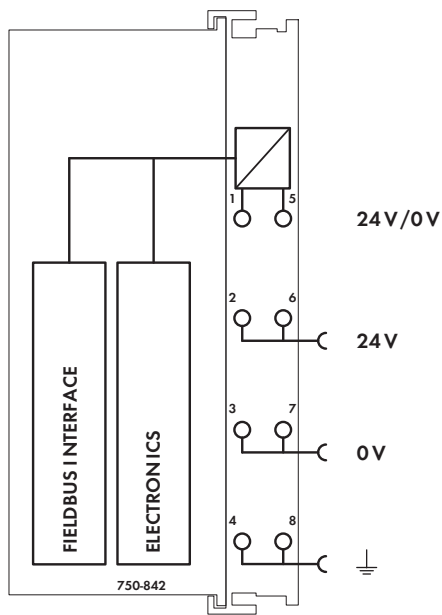
The programmable fieldbus controller for ETHERNET combines the WAGO fieldbus coupler for ETHERNET with the functionality of a PLC. Programming of the application is performed in accordance with IEC 61131-3. By means of function blocks the programmer can program the clients and servers for all transport protocols (TCP, UDP, etc.) via Socket-APIs.

Characteristics and use:

- The use of decentralized control can better support a PLC or PC
- Complex applications can be divided into multiple tasks
- Programmable response in the event of a fieldbus failure
- Signal pre-processing reduces fieldbus transmissions
- Peripheral equipment can be controlled directly, resulting in faster system response times
- Simple, self-sufficient control

Description	Item no.	Pack. unit
ETHERNET Controller 10 MBit	750-842	1
<b>Accessories</b>		
WAGO-I/O-PRO CAA	759-333	1
Miniature WSB quick marking system,		
plain	248-501	5
with marking	see pages 256 ... 257	
<b>Approvals</b>		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
EN 60079-15	I M2 / II 3 GD Ex nA nL IIC T4 BR-Ex nA II T4	
Marine applications	see "Approvals Overview" in section 1	

System Data	
No. of controllers connected to Master	limited by ETHERNET specification
Transmission medium	Twisted Pair S-UTP 100 Ω cat. 5
Max. length of fieldbus segment	100 m between hub station and 750-842; max. length of network limited by ETHERNET specification
Baud rate	10 Mbits/s
Buscoupler connection	RJ-45
Protocols	MODBUS/TCP, HTTP, BootP, MODBUS/UDP
Programming	WAGO-I/O-PRO 32 (as of firmware SW 15 also programmable with WAGO-I/O-PRO CAA)
IEC 61131-3	IL, LD, FBD, ST, FC



### Technical Data

Number of I/O modules	64
Fieldbus	
Max. input process image	512 bytes
Max. output process image	512 bytes
Max. Input variables	512 bytes
Max. Output variables	512 bytes
Configuration	automatic
Program memory	128 Kbytes
Data memory	64 Kbytes
Non-volatile memory (retain)	8 Kbytes
Cycle time	< 3ms for 1,000 statements / 256 dig. I/Os
Voltage supply	DC 24 V (-25 % ... +30 %)
Max. input current (24 V)	500 mA
Efficiency of the power supply	87 %
Internal current consumption (5 V)	200 mA
Total current for I/O modules (5 V)	1800 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	DC 24 V (-25 % ... +30 %)
Current via power jumper contacts (max.)	DC 10 A

### General Specifications

Operating temperature	0 °C ... +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	197 g
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC CE-Immunity to interference	acc. to EN 50082-2 (1996)
EMC CE-Emission of interference	acc. to EN 50081-1 (1993)
EMC marine applications -	
Immunity to interference	acc. to Germanischer Lloyd (2003)
EMC marine applications -	
Emission of interference	acc. to Germanischer Lloyd (2003)