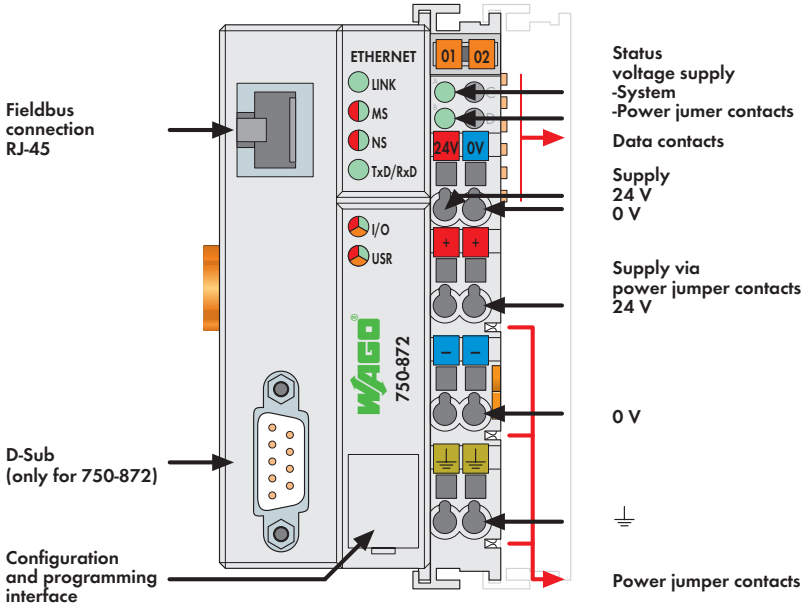
750-872

Programmable Fieldbus Controller for Telecontrol Applications

10/100 Mbits/s; digital and analog signals



The programmable fieldbus controller of the WAGO-I/O-SYSTEM meets the requirements for use in telecontrol applications.

The controller offers many different application protocols which can be used for data acquisition or control (MODBUS TCP/-RTU, IEC60870-5-101/-104, 3964R, RK512, ETHERNET/IP) or for system management and diagnostics (HTTP, BootP, DHCP, DNS, SNTP, FTP, SNMP and SMTP).
HTML pages can be placed on an internal server for use in WEB-based applications. Programs can be called directly via XML and ASP. Furthermore, the product incorporates library functions for e-mail, SOAP, ASP, IP configuration, ETHERNET sockets and file system.

The controller, based on a 32-bit CPU, is capable of multitasking and has a battery-backed, real-time clock. Programming of the application is performed in accordance with IEC 61131-3. The programmer can access all fieldbus and I/O data.

The programmer can access the IEC60870-5-101 and –104 telecontrol protocol via function blocks using the CoDeSys program.

As an alternative, users who do not want to write a PLC program can simply parameterize the IEC 60870-5-101 and -104 telecontrol protocol within the CoDeSys environment.

Description	Item no.	Pack. unit
Telecontrol Controller RJ-45 + D-Sub	**750-872**	1
Telecontrol Controller RJ-45	**750-872/020-000**	1

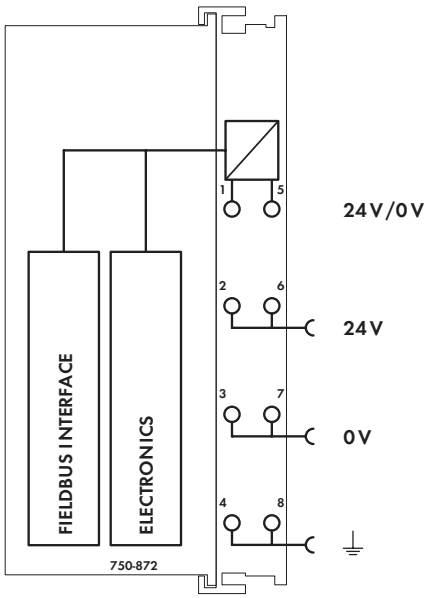
Accessories		Item no.	Pack. unit
Miniature WSB Quick marking system			
	plain	**248-501**	5
	with marking	see Full Line Catalog 08/09 Volume 3, Section 1	

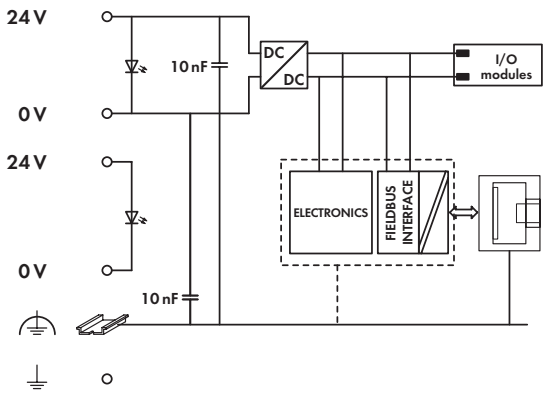
Approvals

Conformity marking	CE
Marine applications	pending

System Data

System data ETHERNET:	
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 hub station and 750-872; max. length of network limited by ETHERNET specification
Baud rate	10/100 Mbits/s
Buscoupler connection	RJ-45
Protocols	MODBUS/TCP (UDP), ETHERNET/IP, HTTP, BootP, DHCP, DNS, SNTP, FTP, SNMP
System data Serial:	
(only for 750-872)	
No. of controllers connected to Master	limited
Transmission medium	shielded Cu cable 2 (4) x 0.25 mm²
Max. length of fieldbus segment	1200 m (depending on baud rate/cable)
Baud rate	9600 baud ... 115 200 baud
Buscoupler connection	1 x D-Sub 9; socket
Programming	WAGO-I/O-PRO CAA
IEC 61131-3	IL, LD, FBD, ST, FC
Libraries	IEC 60870-5-101/-104, 3964R/RK512





Technical Data

Number of I/O modules	64
with bus extension	250
Fieldbus	
Max. input process image	2 Kbytes
Max. output process image	2 Kbytes
Max. input variables	512 bytes
Max. Output variables	512 bytes
Configuration	via PC
Program memory	512 Kbytes
Data memory	256 Kbytes
Non-volatile memory (retain)	24 Kbytes
	(16 Kbytes retain, 8 Kbytes flag)
File system	
750-872	2 MB
750-872/020-000	1 MB
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)	300 mA
Total current for I/O modules (5 V)	1700 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
IEC60870-5-101 and -104 library:	
Document of conformity	see www.wago.com
Number of control stations	4
Number of information objects	512

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	184 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 61000-6-2 (2005)
EMC CE-Emission of interference	acc. to EN 61000-6-4 (2007)