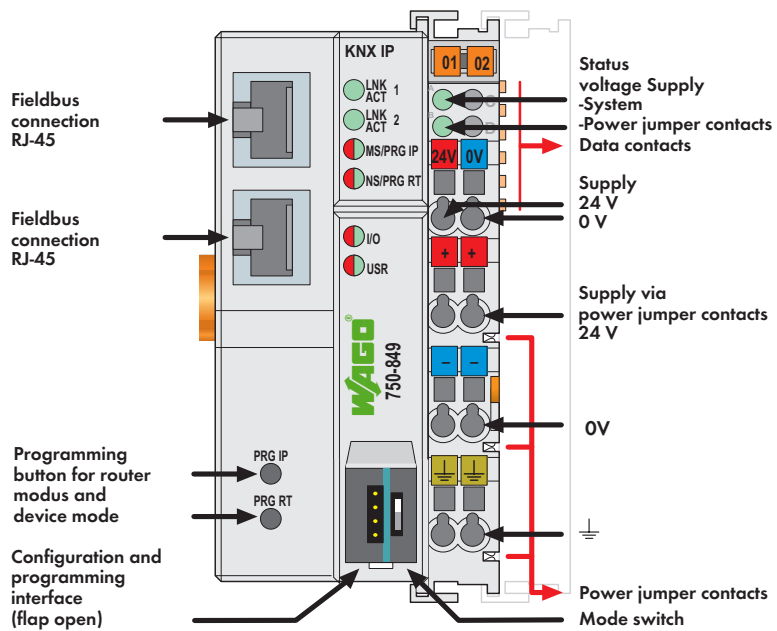


PLC - KNX IP Programmable Fieldbus Controller

32-bit CPU, multitasking



This controller can contain up to two logical KNX devices simultaneously.

1. In conjunction with the WAGO-I/O-SYSTEM, the KNX IP PLC is used as an application controller within KNX IP networks. The PLC supports all digital, analog and specialty modules found within the 750/753 Series.

The controller is capable of 10/100 Mbit/s data rates and is programmable in accordance with IEC 61131-3. KNX objects of any type (EIS/DPT) can be created using the programming tool. Libraries including ready-made function blocks are readily available on the WAGO Web site for programming. The controller supports a maximum of 253 communication objects, 254 group addresses and 254 associations.

Supported DPTs: All (acc. to KNX standard 03_07_02 Datapoint Types V1.0).

2. Combined with the KNX/EIB/TP1 module, the 750-849 KNX IP PLC can be operated as a router on an IP backbone (ETHERNET). No IEC application is required for router functionality.

Both devices are commissioned and configured in ETS3/4 using the WAGO product database. The software includes a plug-in that automatically installs and opens for configuration.

The KNX IP PLC features an integrated 2-port 10/100 Mbit/s switch and allows easy creation of a line structure without requiring additional network components. The maximum number of controllers that can be wired in series is 20.

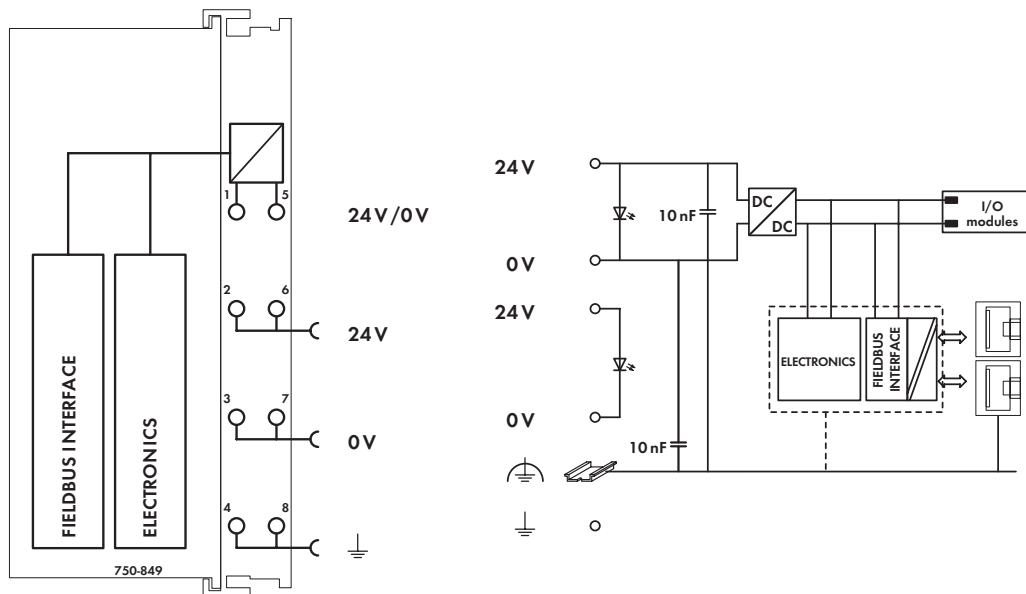
An internal server is available for Web-based applications.

The controller provides 512 KB program memory, 256 KB data memory and 24 KB retain memory. It has a battery-backed RTC and 32-bit multitasking CPU. The controller offers many different application protocols for control tasks (MODBUS, KNXnet/IP) or for system management and diagnostics (HTTP, BootP, DHCP, DNS, AutoIP, SNMP, FTP, SNMP and SMTP).

The number of KNX/EIB/TP1 modules (750-646) that are supported by the KNX IP PLC does not depend on the application.

Description	Item No.	Pack. Unit
KNX IP Controller	750-849	1
Accessories		
WAGO ETS3/4 plug-in	see page 93	
WAGO-I/O-PRO V2.3, RS-232 kit	759-333	1
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see pages 352 ... 353	
Approvals		
KNX certified	Also see "Approvals Overview" in Section 1	
Conformity marking	IP controller: 61/8316/08; IP router: 61/8317/08	
Shipbuilding	CE	
UL 508	ABS, DNV, GL, KR	

System Data	
No. of controllers	limited by network topology
Transmission medium	S-UTP 100 Ω Cat 5
Max. length of fieldbus segment	100 m limited by IEEE 802.3
Max. length of network	≤ 2000 m; max. 20 controllers in series
Baud rate	10/100 Mbit/s
Buscoupler connection	2 × RJ-45 (linked via 2-port switch)
Protocols	KNXnet/IP, MODBUS/TCP (UDP), HTTP, BootP, DHCP, DNS, AutoIP, SNMP, FTP, SNMP V3, SMTP
Programming	WAGO-I/O-PRO V2.3
IEC 61131-3	IL, LD, FBD (CFC), ST, FC
KNX-specific	
KNX/TP1 bus specification	1.0
Commissioning (KNX side)	with ETS3/4 plug-in, 2 programming buttons
Device mode:	
Number of communication objects	253
Number of group addresses	254
Number of associations	254
Supported DPTs	All (*acc. to KNX Specification 03_07_02 Data Point Types V 1.0)
Max. number of logical KNX devices, simultaneous	2; 1. device, 2. router (with 1. KNX/EIB/TP1 module)



Technical Data	
Number of I/O modules with bus extension	64
Configuration	via PC
Program memory	512 Kbytes
Data memory	256 Kbytes
Non-volatile memory (retain)	24 Kbytes (16 Kbytes retain, 8 Kbytes flag)
Power supply	24 V DC (-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	24 V DC (-25 % ... +30 %)
Current via power jumper contacts (max.)	10 A DC
Fieldbus (Modbus/TCP):	
Max. input process image	2 Kbytes
Max. output process image	2 Kbytes
Max. input variables	512 bytes
Max. output variables	512 bytes

General Specifications	
Operating temperature	0 °C ... +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / 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	190 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 61000-6-3 (2007)
EMC: marine applications	
- immunity to interference	acc. to Germanischer Lloyd (2003)
EMC: marine applications	
- emission of interference	acc. to Germanischer Lloyd (2003)