PLC - KNX IP Programmable Fieldbus Controller

32-bit CPU, multitasking

Fieldbus connection RJ-45

Fieldbus connection RJ-45

Programming button for router modus and device mode

Configuration and programming interface (flap open)

KNX IP

Status voltage Supply -System -Power jumper contacts Data contacts

Supply 24 V 0 V

Supply via power jumper contacts 24 V

0V

Power jumper contacts

Mode switch
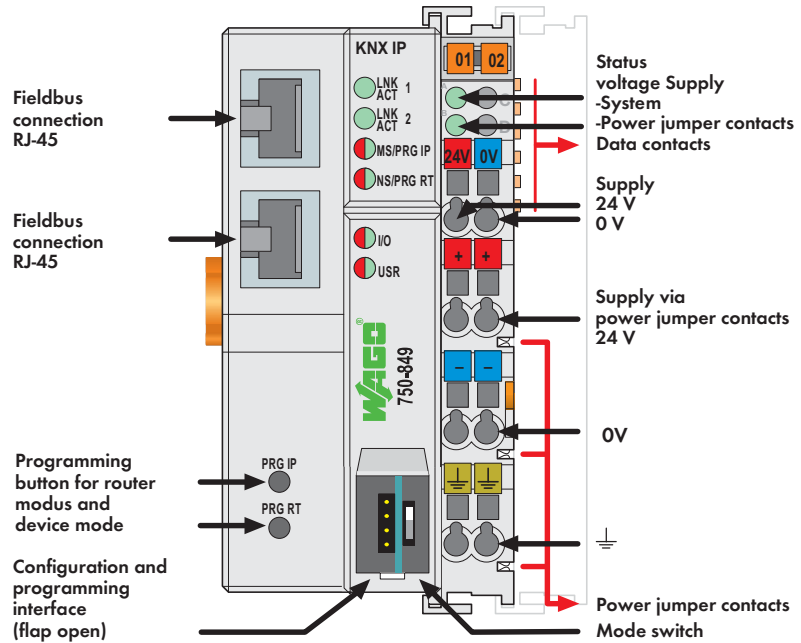
This controller can contain up to two logical KNX devices simultaneously.
1. In conjunction with the WAGO-I/O-SYSTEM, the KNX IP PLC is used as an application controller within KNX IP networks. The PLC supports all digital, analog and specialty modules found within the 750/753 Series.
The controller 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, KNX-net/IP) or for system management and diagnostics (HTTP, BootP, DHCP, DNS, Auto-IP, SNTP, 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	Item No.	Pack. Unit
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	Also see "Approvals Overview" in Section 1
KNX certified	IP controller: 61/8316/08;
	IP router: 61/8317/08
Conformity marking	CE
Shipbuilding	ABS, DNV, GL, KR
ᵁᴸ UL 508	

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 x RJ-45 (linked via 2-port switch)
Protocols	KNXnet/IP, MODBUS/TCP (UDP), HTTP,
	BootP, DHCP, DNS, AutoIP, SNTP, 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)