

Data sheet | Item number: 750-893

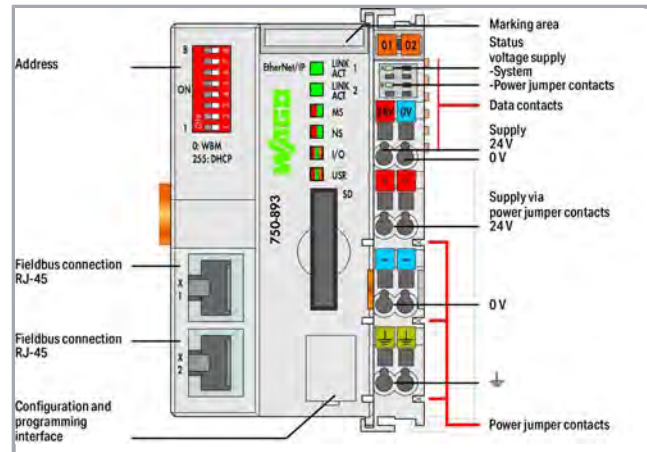
Controller EtherNet/IP; 4th generation; 2 x ETHERNET, SD Card Slot; light gray



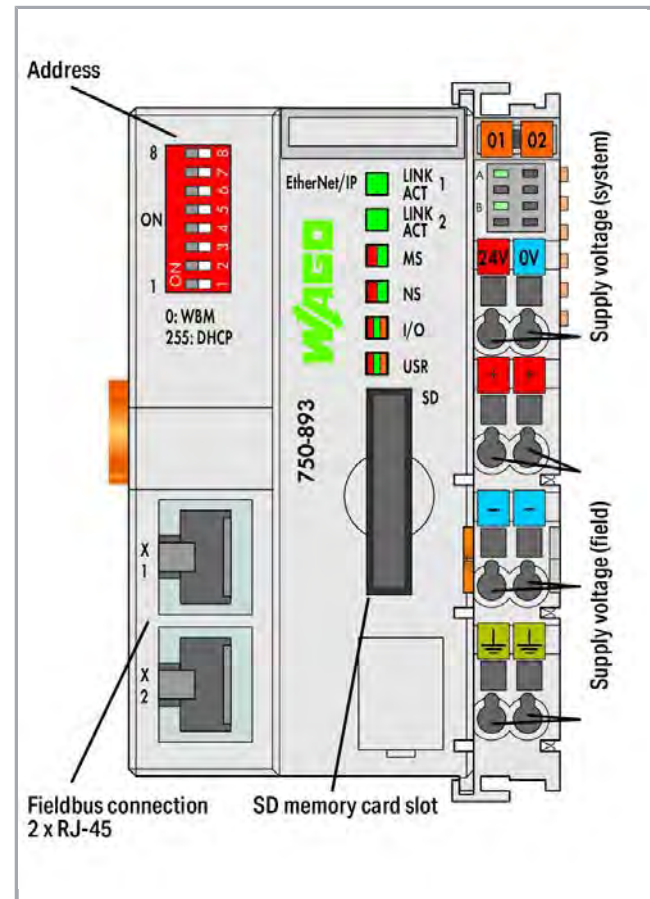
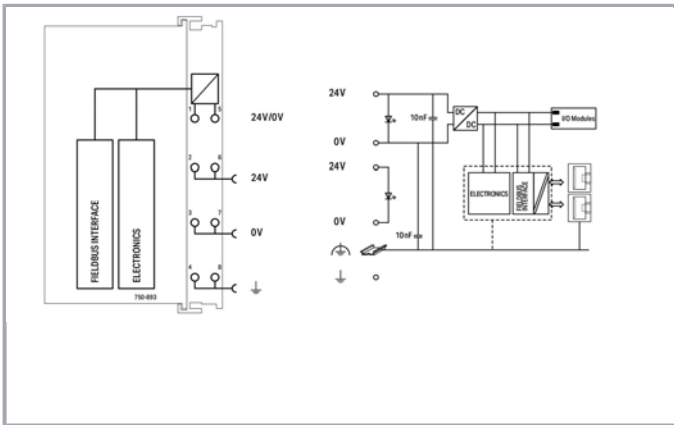
RoHS
Compliant

BOMcheck.net

Color:



Subject to changes. Please also observe the further product documentation!



Item description

The EtherNet/IP Controller can be used as a programmable controller within EtherNet/IP networks in conjunction with the WAGO I/O System. The controller supports all digital, analog and specialty modules found within the 750/753 Series, and is suitable for data rates of 10/100 Mbit/s. Two ETHERNET interfaces and an integrated switch allow the fieldbus to be wired in a line topology, eliminating the need for additional network devices, such as switches or hubs. Both interfaces support autonegotiation and Auto-MDI(X). The DIP switch configures the last byte of the IP address and may be used for IP address assignment. The controller supports EtherNet/IP for use in industrial environments. It also supports a wide variety of standard ETHERNET protocols for easy integration into IT environments (e.g., HTTP(S), BootP, DHCP, DNS, SNTP, (S)FTP, SNMP). An integrated Webserver provides user configuration options, while displaying the controller's status information. The IEC 61131-3 programmable controller is multitasking-capable and features a capacitor-backed RTC. A data memory of 8 MB is available. The controller is equipped with a removable memory card slot. A memory card can be used to transfer device parameters or files (e.g., boot files) from one controller to another. The memory card can be accessed via FTP and be used as an additional drive.

Data

Technical Data

Communication

EtherNet/IP™

ETHERNET protocols

HTTP(S)

Subject to changes. Please also observe the further product documentation!



	BootP DHCP DNS SNTP (S)FTP SNMP
Visualization	Web Visu
CPU	32 bits
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD), Continuous Function Chart (CFC) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	WAGO-I/O-PRO V2.3 (based on CODESYS V2.3)
Configuration options	WAGO-I/O-CHECK Web-based management CODESYS Library
Baud rate (communication/fieldbus 1)	10/100 Mbit/s
Baud rate	10/100 Mbit/s
Transmission medium (communication/fieldbus)	Twisted Pair S-UTP; 100 Ω; Cat. 5; 100 m maximum cable length
Transmission performance	Class D per EN 50173
Program memory	8 MB
Data memory	8 MB
Non-volatile software memory	32 Kbytes
Memory card type	SD and SDHC up to 32 GB (all guaranteed properties only valid with WAGO 758-879/000-001 Memory Card)
Memory card slot	Push-push mechanism; Cover lid (sealable)
Number of modules per node (max.)	250
Number of modules without a bus extension (max.)	64
Input and output (fieldbus) process image (max.)	1020 Worte/1020 Worte
Indicators	LED (LINK/ACT) green: Network connection via ports 1 ... 2; LED (MS, NS) red/green: Status of node, network; LED (I/O, USR) red /green/orange: Local data bus status, status programmable by user; LED (A, B) green: System power supply status, field supply
Supply voltage (system)	DC 24 V (-25 ... +30 %); via pluggable connector (CAGE CLAMP® connection)
Input current (typ.) at nominal load (24 V)	500 mA
Power supply efficiency (typ.) at nominal load (24 V)	90 %
Power consumption (5 V system supply)	440 mA
Total current (system supply)	1,700 mA
Supply voltage (field)	DC 24 V (-25 ... +30 %); via power jumper contacts

Subject to changes. Please also observe the further product documentation!



Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 V system/field

Connection data

Connection technology: communication/fieldbus	EtherNet/IP: 2 x RJ-45
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	6 x CAGE CLAMP®
Connection type (1)	System/field supply
Solid conductor	0,08 ... 2,5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0,08 ... 2,5 mm² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Connection technology: Device configuration	1 x Male connector; 4-pole

Geometrical Data

Width	61,5 mm / 2.421 inch
Height	71,9 mm / 2.831 inch
Height from upper-edge of DIN-rail	64,7 mm / 2.547 inch
Depth	100 mm / 3.937 inch

Mechanical data

Weight	151.8 g
Color	light gray
Housing material	Polycarbonate; Polyamide 6.6

Environmental Requirements

Surrounding air temperature (operation)	0 ... 55 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Relative humidity (without condensation)	95 %
Mounting position	any
Mounting type	DIN-35 rail
Vibration resistance	4g per IEC 60068-2-6

Subject to changes. Please also observe the further product documentation!

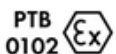
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4055143889179
Customs tariff number	85371091990

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079	TUEV_14_ATEX_148929_X
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750

Subject to changes. Please also observe the further product documentation!

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	LR Lloyds Register	-	02/20026 (E6)
	RINA RINA Germany GmbH	-	ELE066419XG

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Sec11

Counterpart

Compatible products

system box

Subject to changes. Please also observe the further product documentation!


Item no.: 850-804

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip


Item no.: 850-804/000-001

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip


Item no.: 850-805

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip


Item no.: 850-814/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate


Item no.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate


Item no.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate


Item no.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate


Item no.: 850-825

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20


Item no.: 850-826

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip


Item no.: 850-826/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip


Item no.: 850-827

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip


Item no.: 850-827/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip


Item no.: 850-828

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip


Item no.: 850-828/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip


Item no.: 850-834

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

Subject to changes. Please also observe the further product documentation!

**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

memory card

**Item no.: 758-879/000-001**

Memory Card SD; SLC-NAND; 2 GByte; Temperature from -40 to 90 °C

wiring and connectors

**Item no.: 750-975**

ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly; light gray

**Item no.: 750-977/000-011**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22

**Item no.: 750-977/000-012**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22

**Item no.: 750-977/000-021**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24

**Item no.: 750-977/000-022**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24

**Item no.: 750-978/000-011**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief

**Item no.: 750-978/000-012**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief

**Item no.: 750-978/000-021**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief

**Item no.: 750-978/000-022**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief

**Item no.: 750-979/000-011**

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief

Subject to changes. Please also observe the further product documentation!



Item no.: 750-979/000-012
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief



Item no.: 750-979/000-021
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief



Item no.: 750-979/000-022
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief

General accessories



Item no.: 750-921
Bluetooth® Adapter; light gray



Item no.: 750-923
Configuration cable; USB connector; Length: 2.5 m; black



Item no.: 750-923/000-001
Configuration cable; USB connector; Length: 5 m

software



Item no.: 759-333
WAGO-I/O-PRO



Item no.: 759-333/000-923
WAGO-I/O-PRO; USB-Set



Item no.: 759-911
WAGO-I/O-PRO; CD

Carrier rail

Item no.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm



Item no.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715



Item no.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715



Item no.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm



Item no.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715



Item no.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

Subject to changes. Please also observe the further product documentation!


Item no.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715


Item no.: 210-198

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored


Item no.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715


Item no.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715


Item no.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715


Item no.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

Marking accessories

Item no.: 2009-145

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white


Item no.: 2009-145/000-002

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow


Item no.: 2009-145/000-005

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red


Item no.: 2009-145/000-006

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue


Item no.: 2009-145/000-007

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray


Item no.: 2009-145/000-012

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange


Item no.: 2009-145/000-023

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green


Item no.: 2009-145/000-024

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet


Item no.: 248-501

Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

Subject to changes. Please also observe the further product documentation!


Item no.: 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow


Item no.: 248-501/000-005

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red


Item no.: 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue


Item no.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray


Item no.: 248-501/000-012

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange


Item no.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green


Item no.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green


Item no.: 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet


Item no.: 750-100

Marker card; as a DIN A4 sheet; plain; white


Item no.: 750-103

Group marker carrier; transparent


Item no.: 750-106

Group marker carrier; transparent

shield connection

Item no.: 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm


Item no.: 790-116

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm


Item no.: 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm


Item no.: 790-140

Shield clamping saddle; diameter of compatible conductor

Subject to changes. Please also observe the further product documentation!


Item no.: 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm


Item no.: 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm


Item no.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

Downloads

Documentation

Manual

Controller EtherNet/IP; G4; 2ETH; SD

V 1.0.2

Controller EtherNet/IP; Generation 4; 2 x ETHERNET; SD Card Slot

Mar 25, 2020

Additional Information

Disposal; Electrical and electronic equipment, Packaging

V 1.0.0

System Description

Overview on WAGO-I/O-SYSTEM 750 approvals

750 Controller, General Product Information

Design Notes

V 2.0.0

Basic conditions and recommendations for higher operational safety

Use in Hazardous Environments

V 1.0.0

Term definition, marking and installation regulations

Device Files

Device Description File

750-919; EDS file for Ethernet/IP / 750-363, 750-823, 750-893

1.0

Sep 9, 2019

Installation Notes

Subject to changes. Please also observe the further product documentation!



Product family

Controller 750

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!