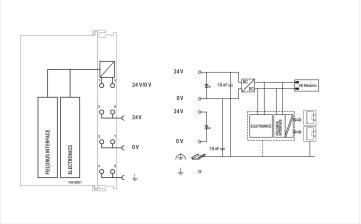
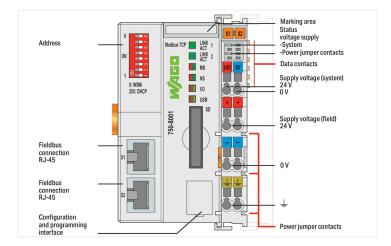
https://www.wago.com/750-8001









This controller can be used as a programmable controller within ETHERNET networks along with the WAGO I/O System.

The controller supports all digital and analog input/output modules, as well 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 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.

This controller supports Modbus TCP 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, SNMP, SFTP).

An integrated Webserver provides user configuration options, while displaying PLC status information.

The controller has role-based user management and supports the RFC 5424 syslog protocol.

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 card can be accessed via FTP and used as an additional drive.

Technical data	
Communication	Modbus (TCP, UDP)
ETHERNET protocols	HTTP(S) BootP DHCP DNS SNTP SFTP SNMP (V2 & V3) TLS1.3 Syslog
Visualization	Webserver with integrated RBAC (Role-Based Access Control)
CPU	32 bits

# Data Sheet | Item Number: 750-8001 https://www.wago.com/750-8001



Technical data	
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	CODESYS V3.5
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 $\Omega$ ; Cat. 5; 100 m maximum cable length
Transmission performance	Class D per EN 50173
Program memory	16 MB
Data memory	32 MB
Non-volatile software memory	128 KB
Type of memory card	SD and SDHC up to 32 GB (all guaranteed properties only valid with WAGO's 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 process image (fieldbus) max.	1020 words/1020 words
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)	24 VDC (-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 %
Current consumption (5 V system supply)	440 mA
Total current (system supply)	1700 mA
Supply voltage (field)	24 VDC (-25 +30 %); via power jumper contacts
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 VAC system/field

Connection data	
Connection technology: communication/fieldbus	Modbus (TCP, UDP): 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 mm <sup>2</sup> / 28 14 AWG
Fine-stranded conductor	0.08 2.5 mm <sup>2</sup> / 28 14 AWG
Strip length	89 mm / 0.31 0.35 inches
Connection technology: device configuration	1 x Male connector; 4-pole

Physical data	
Width	61.5 mm / 2.421 inches
Height	100 mm / 3.937 inches
Depth	71.9 mm / 2.831 inches
Depth from upper-edge of DIN-rail	64.7 mm / 2.547 inches

https://www.wago.com/750-8001



Mechanical data	
Weight	155.1 g
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CF

Environmental requirements	
Ambient temperature (operation)	0 +55 °C
Ambient temperature (operation)  Ambient temperature (storage)	-25 +85 °C
	-25+65 C
Protection type	
Pollution degree	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
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
Fire load	2.484 MJ
Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible $\mathrm{SO}_2$ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data	
PU (SPU)	1 pcs
Country of origin	DE
GTIN	4066966361902
Customs tariff number	85371091990

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

# Approvals / Certificates

# Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

# Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194

https://www.wago.com/750-8001



#### Approvals for hazardous areas



Standard **Certificate Name** Approval

UL Underwriters Laboratories Inc. (HAZARDOUS LOCA-

E198726

#### **Downloads**

# **Environmental Product Compliance**

Compliance Search

**Environmental Product** Compliance 750-8001

#### Documentation

Manual

Basic Controller 100

V 1.0.1

pdf

05.05.2023 3666.78 KB **System Description** 

Basic Controller 100, Allgemeine Produktin-

formationen

pdf 431.09 KB

### CAD/CAE-Data

CAD data

2D/3D Models

750-8001

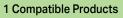
# **Engineering-Software**

Configuration and Commissioning Software

(759-316) WAGO Ether-06.18.01.01

net Settings / Serie 750 02.09.2021

26678.54 KB



1.1 Required Accessories

1.1.1 Memory card

https://www.wago.com/750-8001



#### 1.1.1.1 Memory card





Item No.: 758-879/000-2108

Memory Card SD; pSLC-NAND; 8 GB; Temperature range: -40 to 90°C

Item No.: 758-879/000-001

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

#### 1.2 Optional Accessories

#### 1.2.1 Cables and connectors

#### 1.2.1.1 Connector plug







Connector ETHERNET; RJ-45; Cat. 6A;

Connector ETHERNET; RJ-45; Cat. 6A;

angled; Code T568B; AWG 22; Strain reli-

Item No.: 750-979/000-012

Item No.: 750-977/000-021

straight; Code T568A; AWG 24

Item No.: 750-979/000-022

Connector ETHERNET; RJ-45; Cat. 6A; angled; 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 Item No.: 750-979/000-021

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain reli-



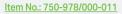
Item No.: 750-978/000-021

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



Item No.: 750-977/000-011

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



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



Item No.: 750-978/000-022

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



Item No.: 750-977/000-012

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

## Item No.: 750-978/000-012

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain reliItem No.: 750-977/000-022

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



Item No.: 750-975

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

### 1.2.2 Communication

#### 1.2.2.1 Communication cable





Item No.: 750-923

Configuration cable; USB connector; Length: 2.5 m

# Item No.: 750-923/000-001

Configuration cable; USB connector; Length: 5 m

### 1.2.3 DIN-rail

#### 1.2.3.1 Mounting accessories



Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

thick; 2 m long; unslotted; similar to EN





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.: 210-508

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



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



60715; silver-colored

Item No.: 210-196

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

#### Item No.: 210-114

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

# Item No.: 210-118

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

#### Item No.: 210-115

Item No.: 210-197

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored

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https://www.wago.com/750-8001



#### 1.2.3.1 Mounting accessories



#### 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; silver-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; silver-colored



#### Item No.: 210-113

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



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

#### 1.2.4 Marking

#### 1.2.4.1 Group marker carrier



Item No.: 750-106
Group marker carrier

# 1.2.4.2 Marker



#### Item No.: 750-100

Marker card; as a DIN A4 sheet; plain

#### 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.: 2009-145/000-023

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

#### Item No.: 2009-145/000-012

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

#### Item No.: 2009-145/000-005

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

#### Item No.: 2009-145/000-024

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

#### 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.: 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.: 248-501/000-023

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



#### Item No.: 248-501/000-017

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

# Item No.: 248-501/000-012

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

#### .

Item No.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

#### Item No.: 248-501/000-024

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



#### Item No.: 248-501

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

#### Item No.: 248-501/000-002

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

### 1.2.4.3 Marker carrier



#### Item No.: 750-103

Group marker carrier

#### 1.2.5 Shield termination

https://www.wago.com/750-8001



#### 1.2.5.1 Shield clamping saddles

#### Item No.: 790-108

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

#### Item No.: 790-208

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

#### Item No.: 790-116

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

#### Item No.: 790-216

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

# Item No.: 790-124

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

#### Item No.: 790-220

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

#### Item No.: 790-140

Shield clamping saddle; diameter of compatible conductor

#### 1.2.6 Software

#### 1.2.6.1 Basic version





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

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

# 1.2.7 System enclosure

#### 1.2.7.1 System enclosure





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.: 850-827

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

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 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.: 850-827/002-000

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

## Item No.: 850-828/002-000

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

### Item No.: 850-834

Item No.: 850-828

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



#### Item No.: 850-835

IP65 enclosure; Polyester (RAL 7032); Wx-HxD (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

# 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

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

Current addresses can be found at:: www.wago.com

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