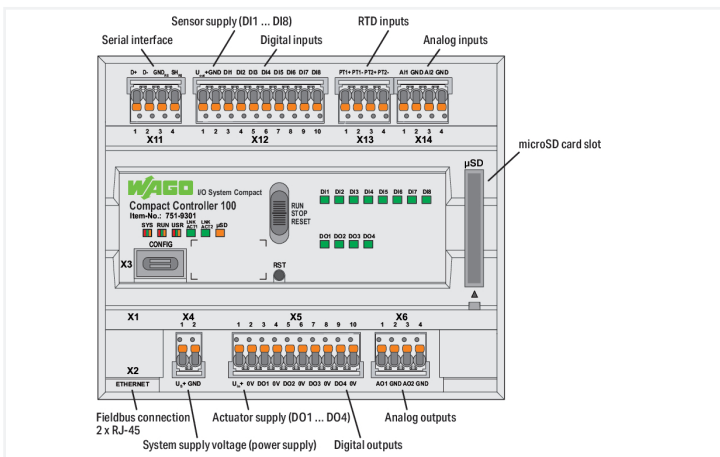
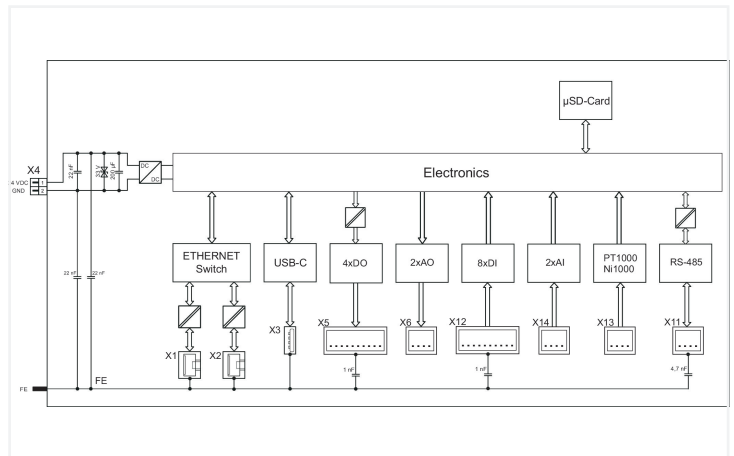
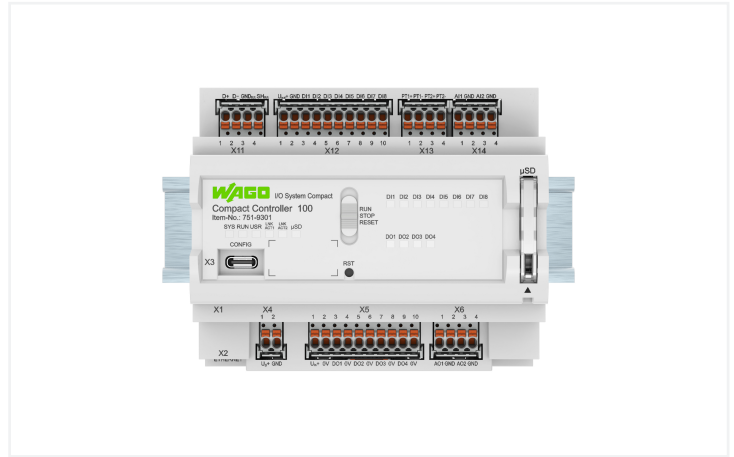
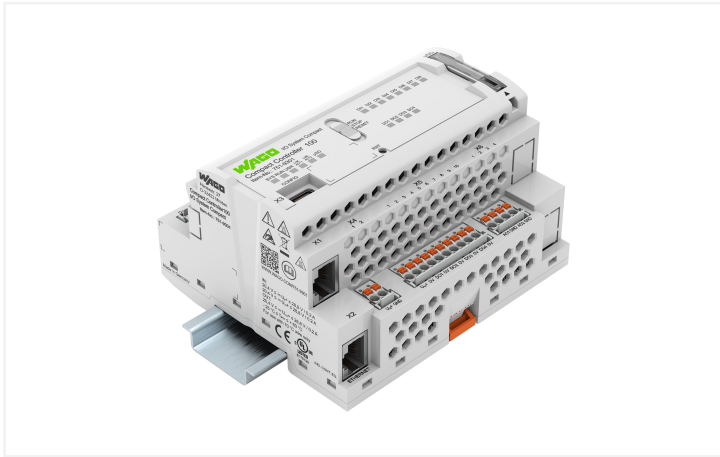


Data Sheet | Item Number: 751-9301

Compact Controller 100; 8DI 4DO 2AI 2AO 2NI1K/PT1K 1RS485; 2 x ETHERNET; SD

<https://www.wago.com/751-9301>



The Compact Controller 100 with a real-time Linux® operating system offers users complete freedom: it can be freely programmed with CODESYS V3, but also supports IEC 61131-independent engineering using tools like Node-RED, Python, or C++. Installing Docker® on the device later as a virtualization environment is also easy and straightforward. This addition transforms the Compact Controller 100 into a full-fledged IIoT device with gateway functionality. In doing so, WAGO seamlessly integrates the requirements of two distinct domains into a single device, leveraging its expertise where "automation meets IT." Another advantage of the Compact Controller 100 is its DIN-rail built-in design according to DIN 43880, allowing it to be mounted on small distribution boards. The I/O unit is housed within the same compact enclosure as the controller, eliminating the need for additional space for extra control components. The wiring interface is removable, which simplifies installation and commissioning.

Key Benefits:

- Quick, easy, flexible engineering
- Controller with real-time Linux® operating system
- Compact controller with I/Os in a DIN-rail-mount enclosure

Technical data	
Communications	Modbus (TCP, UDP) EtherCAT® Master EtherNet/IP™ Adapter (slave) EtherNet/IP™ Scanner Modbus RTU RS-485 interface OPC UA Server/Client MQTT BACnet/IP, requires an additional license Telecontrol protocols, requires an additional license
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Telecontrol protocols	IEC 60870 (additional license as slave or master) IEC 61850 (additional license as Client or Server) DNP3 (additional license as Slave or Master)
Visualization	Web-Visu
Operating system	Real-time Linux (with PREEMPT_RT patch)
CPU	Cortex A7; 650 MHz
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 Node RED
Configuration options	CODESYS V3.5 Ethernet Settings Web-Based Management WAGOupload WAGO Solution Builder
Transmission rate	ETHERNET: 10/100 Mbit/s
Transmission medium (communication/fieldbus)	ETHERNET: Twisted pair S-UTP; 100 Ω; Cat. 5; 100 m maximum cable length
Main memory (RAM)	512 MB
Internal memory (flash)	4096 MB
Non-volatile hardware memory	128 KB
Program memory	32 MB
Data memory	128 MB
Non-volatile software memory	128 KB
Type of memory card	microSD up to 32 GB (all guaranteed properties only valid with WAGO's memory card)
Memory Card Slot	Push-push mechanism
Indicators	LED (SYS, RUN), red/green: Status of system; LED (USR) red/green: User programmable status (can be used via CODESYS library); LED (SD) orange: Status of microSD; LED (LNK/ACT) green: Network connection via ports 1 ... 2; LED (DI1 ... 8) green: Status of inputs; LED (DO1 ... 4) green: Status of outputs
Control Elements	Operating mode switch (RUN, STOP, RESET); reset button
Supply voltage (system)	24 VDC (-15 ... +20 %); Via wiring interface (<i>picomAX</i> ® 3.5; Push-in CAGE CLAMP® connection)
Current consumption (system) max.	500 mA

Technical data

Supply voltage (field)	24 VDC (-15 ... +20 %); Via wiring interface (<i>picoMAX</i> ® 3.5; Push-in CAGE CLAMP® connection)
Field current consumption max. (digital outputs) $U_{in} +$	2000 mA
Isolation	1250 V (DC 1 min., between system and field level (digital outputs))

Technical Data (Inputs/Outputs)

Digital inputs

Number of digital inputs	8
Input characteristic	Type 3 (per EN 61131-2)

Digital Outputs

Number of digital outputs	4
Output current (per channel)	500 mA (DC)
Output current	short-circuit-protected

Analog inputs

Number of analog inputs	2
Resolution of analog inputs	16 bits
Input signal (voltage)	0 ... 10 V

Analog Outputs

Number of analog outputs	2
Resolution of analog outputs	12 bits
Output signal (voltage)	0 ... 10 V
Load impedance (voltage output)	$\geq 5 \text{ k}\Omega$

RTD inputs

Number of measurement inputs	2
Temperature range	-60 ... 350 °C, Pt1000, Ni1000

Connection data

Connection technology: communication/fieldbus	Modbus (TCP, UDP): 2 x RJ-45; RS-485 interface: 1 x Female connector, 4-pole; Push-in CAGE CLAMP®
Connection technology: system supply	1 x Female connector, 2-pole; Push-in CAGE CLAMP®
Connection technology: field supply	2 x Female connector, 10-pole; Push-in CAGE CLAMP®
Connectable conductor materials	Copper
Solid conductor	0.2 ... 1.5 mm ² / 24 ... 14 AWG
Fine-stranded conductor	0.2 ... 1.5 mm ² / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	108 mm / 4.252 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	55 mm / 2.165 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Housing material	Polycarbonate, polyamid
Fire load	0 MJ
Weight	190 g
Conformity marking	CE; UKCA

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966192865
Customs tariff number	85371091990

Product Classification


UNSPSC	32151705
ETIM 9.0	EC000236
ETIM 8.0	EC000236
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	13e43657-c079-4877-9572-133b61a75030
SCIP notification number (Belgium)	88db0a66-266c-4eee-8bc0-ca9419ffa2ce
SCIP notification number (Bulgaria)	11dc09ae-19b1-4f53-a36d-08c843f71d7a
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SCIP notification number (Romania)	3b91c177-6f13-4542-89b8-455ac81906cb
SCIP notification number (Sweden)	dd94e5b3-71a4-44f4-ad14-2ccabcc82a1c

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083

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
BSH Bundesamt fuer See- schifffahrt und Hydrogra- phie	-	1155
DNV DNV GL SE	DNV-CG-0339,Aug.2021	DNV TAA00003G6

1 Compatible Products

1.1 Product Expansions

1.1.1 Runtime software



Item No.: 2759-2283/211-1000
Runtime; BACnet; 300; M; Single License;
Online activation



Item No.: 2759-2273/211-1000
Runtime; BACnet; 300; S; Single License;
Online activation



Item No.: 2759-283/211-1000
Runtime; BACnet; 300; Single License;
Online activation



Item No.: 2759-2293/211-1000
Runtime; DNP3 Master; M; Single License;
Online activation



Item No.: 2759-2290/211-1000
Runtime; DNP3 Slave; Single License; On-
line activation



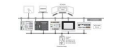
Item No.: 2759-293/211-1000
Runtime; IEC60870 Master; M; Single Li-
cense; Online activation



Item No.: 2759-290/211-1000
Runtime; IEC60870 Slave; Single License;
Online activation



Item No.: 2759-2243/211-1000
Runtime; IEC61850 Client; M; Single Li-
cense; Online activation



Item No.: 2759-2240/211-1000
Runtime; IEC61850 Server; Single Licen-
se; Online activation



Item No.: 2759-248/211-1000
Runtime; Multi Cloud Connectivity; Single
License; Online activation



Item No.: 2759-247/211-1000
Runtime; Sparkplug; Single License; Onli-
ne activation

1.1.2 Software Application



Item No.: 8101-2000/000-025
Application Load Management; Basic
Software