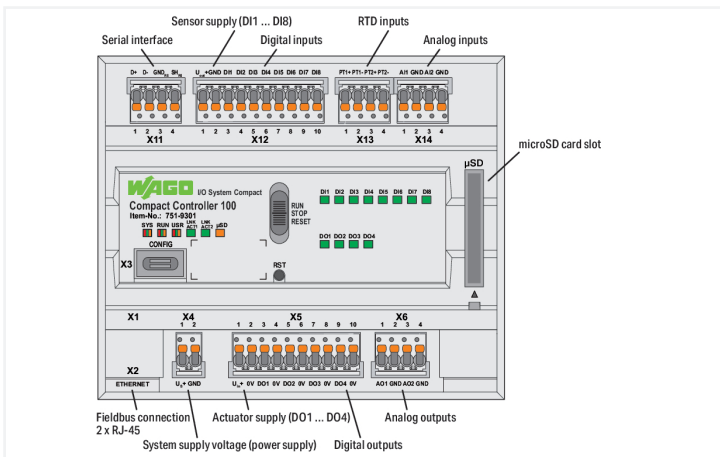
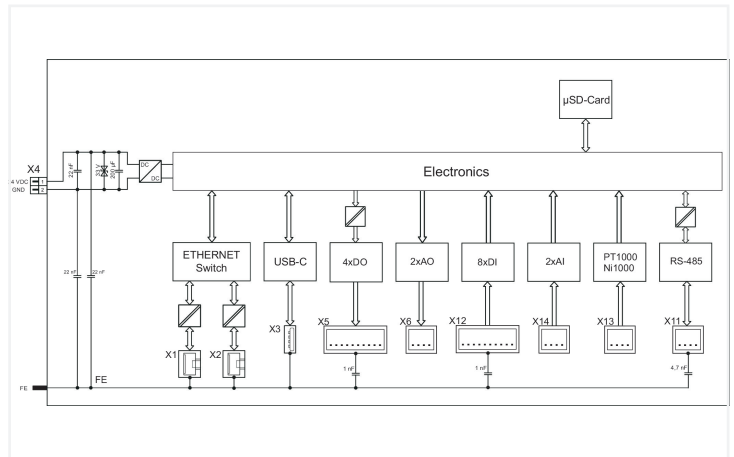
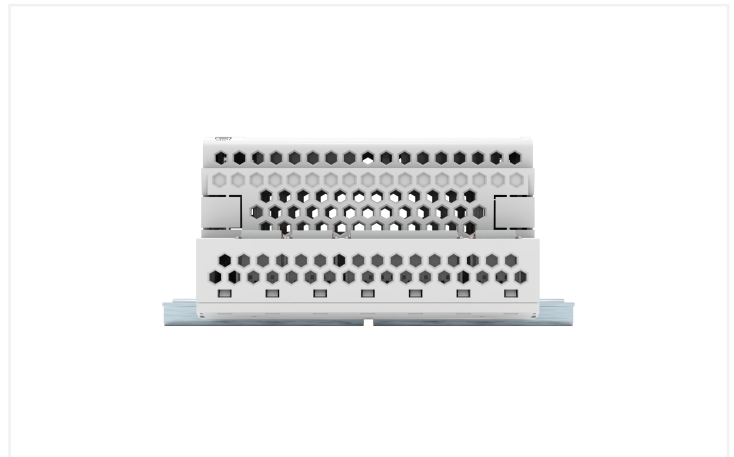
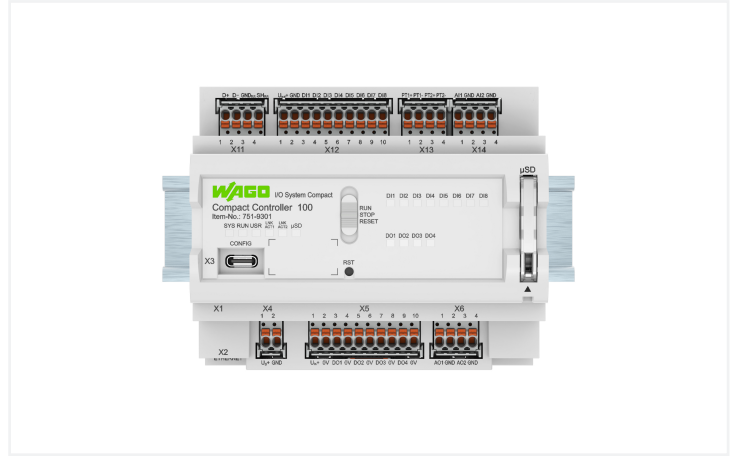


Data Sheet | Item Number: 751-9301

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++. Docker® can also be easily installed later on the device as a virtualization environment. 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 removable wiring interface simplifies both installation and commissioning.

Key Benefits:

- Fast, flexible, and intuitive engineering
- Controller with real-time Linux® operating system
- Compact controller with integrated 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	
Control Elements	Operating mode switch (RUN, STOP, RESET); reset button
Supply voltage (system)	24 VDC (-15 ... +20 %); via wiring interface (picoMAX® 3.5; Push-in CAGE CLAMP® connection)
Current consumption (system) max.	500 mA
Supply voltage (field)	24 VDC (-15 ... +20 %); via wiring interface (picoMAX® 3.5; Push-in CAGE CLAMP® connection)
Field current consumption max. (digital outputs) U _{in} +	2000 mA

Technical data

Isolation	1250 V (DC 1 min., between system and field level (digital outputs))
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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)	≥ 5 kΩ

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®
Connection type	Female connector; 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
Weight	190 g
Conformity marking	CE; UKCA

Environmental requirements

Ambient temperature (operation)	-25 ... +60 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	any
Relative humidity (without condensation)	95 %
Vibration resistance	1g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-3

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 10.0	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
SCIP notification number (Czech Republic)	bec5377d-5859-41c6-b4cb-48c5d05e2a75
SCIP notification number (Denmark)	e9279165-016d-453f-9dcc-3276a5d77b81
SCIP notification number (Finland)	9e16130a-1548-4524-851e-73aef0bf2f7d
SCIP notification number (France)	3c08470f-91e2-4da4-9406-fb48097d5db5
SCIP notification number (Germany)	5d894a4c-6de8-4534-98b1-627be0119caf
SCIP notification number (Hungary)	d58f4caf-ceb4-4db3-9661-bea780fa2c68
SCIP notification number (Italy)	38077f8a-efe7-497e-89aa-70f38853d1bf
SCIP notification number (Netherlands)	87a8e65c-e155-4a98-8930-8cb1aff7c42
SCIP notification number (Poland)	365a1927-9cc7-48b5-abfb-cb13c9ef76f4
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
KC National Radio Research Agency	Article 58-2, Clause 3	R-R-W43-CC751

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 Seeschiff-fahrt und Hydrographie	-	1155
DNV DNV GL SE	DNV-CG-0339,Aug.2021	DNV TAA00003G6

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 751-9301 ↓

Documentation

Manual			
Product manual WAGO Device Manager	1552525323 5 en-US 2026-03-24 14:26 13.05.2026	pdf 2427.19 KB	↓
Product Manual Compact Controller 100	1.7.0 16.08.2024	pdf 2190.55 KB	↓

System Description	
Compact Controller 100, Allgemeine Produktinformationen	pdf 238.31 KB ↓

Bid Text			
751-9301		xml 8.82 KB	↓
751-9301		docx 29.96 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 751-9301



Engineering-Software

Configuration and Commissioning Software

CODESYS V3.5		png 315.13 KB	
WAGOupload	1.16.1.0 02.02.2022	zip 12111.45 KB	

Runtime Software

Firmware

0751-9301, Compact Controller 100	V 23 30.11.2022	zip 97394.03 KB	
751-9301; Compact Controller 100	V 23 30.11.2022	zip 96534.07 KB	

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; Online activation

Item No.: 2759-293/211-1000

Runtime; IEC60870 Master; M; Single License; 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 License; Online activation



Item No.: 2759-2240/211-1000

Runtime; IEC61850 Server; Single License; 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; Online activation

1.2 Optional Accessories

1.2.1 Female connector

1.2.1.1 Female connector/socket



Item No.: 2091-1130

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 10-pole; 1,50 mm²; light gray



Item No.: 2091-1110/002-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 10-pole; Gripping plate sliding connector release; 1,50 mm²; light gray



Item No.: 2091-1110

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 10-pole; Gripping plate; 1,50 mm²; light gray



Item No.: 2091-1122

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; 1,50 mm²; light gray



Item No.: 2091-1102/002-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; Gripping plate sliding connector release; 1,50 mm²; light gray



Item No.: 2091-1102

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; Gripping plate; 1,50 mm²; light gray



Item No.: 2091-1124

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; 1,50 mm²; light gray



Item No.: 2091-1104/002-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; Gripping plate sliding connector release; 1,50 mm²; light gray



Item No.: 2091-1104

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; Gripping plate; 1,50 mm²; light gray

1.2.2 Memory card

1.2.2.1 Memory card



Item No.: 758-879/000-3102

Memory Card SD Micro; 2 GByte



Item No.: 758-879/000-3108

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

1.2.3 Tool

1.2.3.1 Operating tool



Item No.: 2092-1630

Unlocking tool; orange