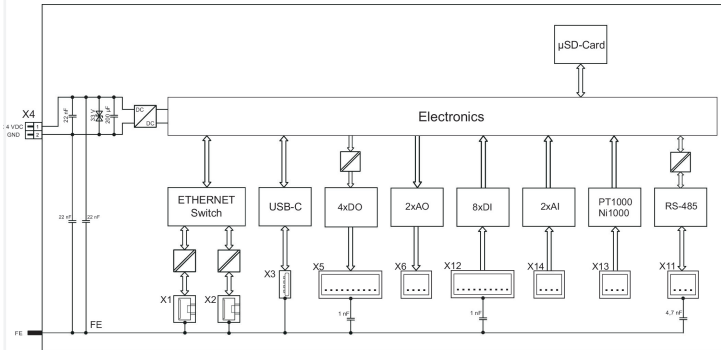
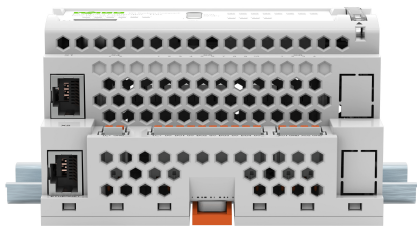
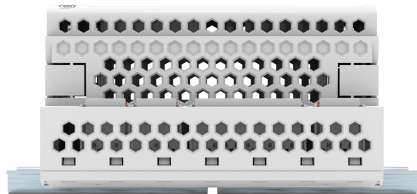
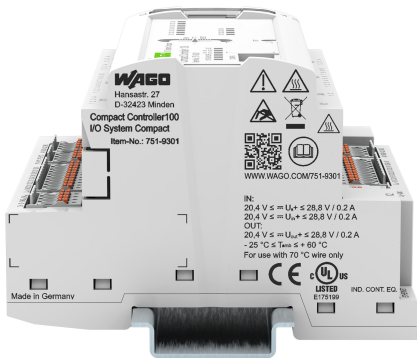
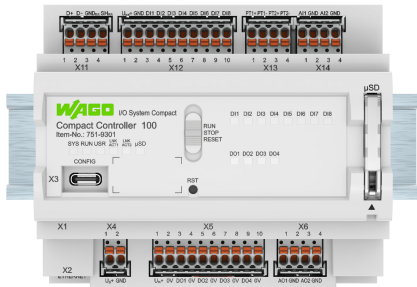
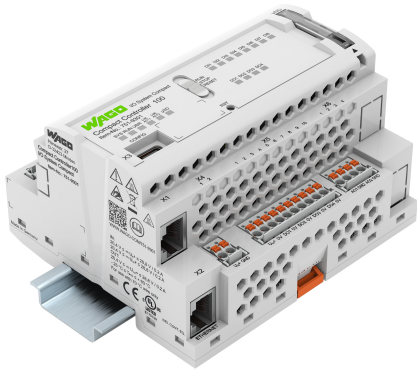
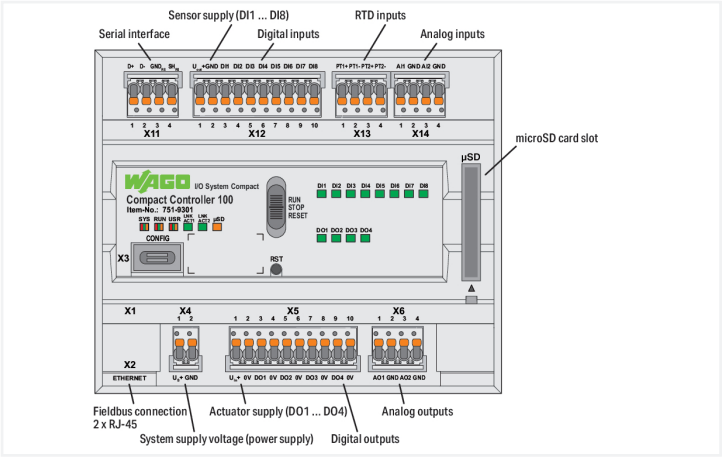








The Compact Controller 100 with a real-time Linux® operating system offers users complete freedom: it can be freely programmed with CODESYS V3, but also supports IEC 61131-independent engineering using tools like Node-RED, Python, or C++. Installing Docker® on the device later as a virtualization environment 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)<br>EtherCAT® Master<br>EtherNet/IP™ Adapter (slave)<br>EtherNet/IP™ Scanner<br>Modbus RTU<br>RS-485 interface<br>OPC UA Server/Client<br>MQTT<br>BACnet/IP, <b>requires an additional license</b><br>Telecontrol protocols, <b>requires an additional license</b>                            |
| ETHERNET protocols                           | DHCP<br>DNS<br>NTP<br>FTP<br>FTPS<br>SNMP<br>HTTP<br>HTTPS<br>SSH                                                                                                                                                                                                                                              |
| Telecontrol protocols                        | IEC 60870 (additional license as slave or master)<br>IEC 61850 (additional license as Client or Server)<br>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)<br>Ladder Diagram (LD)<br>Function Block Diagram (FBD)<br>Continuous Function Chart (CFC)<br>Structured Text (ST)<br>Sequential Function Chart (SFC)                                                                                                                                     |
| Programming environment                      | CODESYS V3.5<br>Node RED                                                                                                                                                                                                                                                                                       |
| Configuration options                        | CODESYS V3.5<br>Ethernet Settings<br>Web-Based Management<br>WAGOupload<br>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                                                                                                                                                                                                                                                         |



| Technical data                                              |                                                                                                      |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 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                                                                                               |
| 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                  |                         | Digital Outputs              |                         |
| Number of digital inputs        | 8                       | Number of digital outputs    | 4                       |
| Input characteristic            | Type 3 (per EN 61131-2) | 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 mm² / 24 ... 14 AWG                                                                   |
| Fine-stranded conductor                       | 0.2 ... 1.5 mm² / 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 |



| Material data      |  |                         |
|--------------------|--|-------------------------|
| Housing material   |  | Polycarbonate, polyamid |
| Fire load          |  | 0 MJ                    |
| 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 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 |
| 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-e155-4a98-8930-8cb1afff7c42 |
| 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<br>GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03083    |

Declarations of conformity and manufacturer's declarations

| Approval                                                | Standard | Certificate Name |
|---------------------------------------------------------|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications



| Approval                                                        | Standard             | Certificate Name |
|-----------------------------------------------------------------|----------------------|------------------|
| BSH<br>Bundesamt fuer See-<br>schifffahrt und Hydrogra-<br>phie | -                    | 1155             |
| DNV<br>DNV GL SE                                                | DNV-CG-0339,Aug.2021 | DNV TAA00003G6   |

Downloads

Environmental Product Compliance

| Compliance Search                            |
|----------------------------------------------|
| Environmental Product<br>Compliance 751-9301 |



Documentation

| Manual                                |                                                      |                |                                                                                                     |
|---------------------------------------|------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------|
| Product manual WAGO Device Manager    | 1552525323   2   en-US   2025-07-29 14:23 29.08.2025 | pdf 2460.70 KB | <a href="#"></a> |
| Product Manual Compact Controller 100 | 1.7.0 16.08.2024                                     | pdf 2190.55 KB | <a href="#"></a> |

| System Description                                              |                  |                                                                                       |
|-----------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|
| Compact Controller<br>100, Allgemeine Pro-<br>duktinformationen | pdf<br>238.31 KB |  |

| Bid Text |                  |                                                                                     |
|----------|------------------|-------------------------------------------------------------------------------------|
| 751-9301 | xml<br>8.82 KB   |  |
| 751-9301 | docx<br>29.96 KB |  |



CAD/CAE-Data

|              |          |  |  |
|--------------|----------|--|--|
| CAD data     |          |  |  |
| 2D/3D Models | 751-9301 |  |  |

Engineering-Software

|                                          |                        |                    |  |
|------------------------------------------|------------------------|--------------------|--|
| Configuration and Commissioning Software |                        |                    |  |
| CODESYS V3.5                             |                        | png<br>315.13 KB   |  |
| WAGOupload                               | 1.16.1.0<br>02.02.2022 | zip<br>12111.45 KB |  |

Runtime Software

|                                   |                    |                    |  |
|-----------------------------------|--------------------|--------------------|--|
| Firmware                          |                    |                    |  |
| 0751-9301, Compact Controller 100 | V 23<br>30.11.2022 | zip<br>97394.03 KB |  |
| 751-9301; Compact Controller 100  | V 23<br>30.11.2022 | zip<br>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



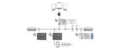
[Item No.: 2759-283/211-1000](#)  
Runtime; BACnet; 300; Single License;  
Online activation



[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; On-  
line activation



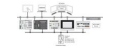
[Item No.: 2759-293/211-1000](#)  
Runtime; IEC60870 Master; M; Single Li-  
cense; Online activation



[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



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