



# Optimal Control and Visualization

For Your Individual Application and Automation Environment:  
WAGO Control and Visualization Solutions



# WAGO Customizes Your Automation – for All

We support our customers with the right hardware and the right software for every application. Whether for the energy industry, building automation, conventional mechanical engineering, shipbuilding or process technology – our products are tailored to your challenges and offer you the best possible control solution for your application.

WAGO's XTR controllers and I/O modules boast extreme temperature resistance, immunity to interference and resistance to impulse voltage and vibration, making them suitable for use even in extreme environmental conditions.



## Mechanical Engineering

Machine and equipment manufacturers are facing numerous challenges: They need to cut costs, improve production flexibility and increase output at the same time. With WAGO products for a wide variety of functions – from data acquisition, to control and data processing, to data visualization and analysis – you have everything you need to meet the demands of Industry 4.0. Digitization supports you on your path to the intelligent networked production of the future.



WAGO Website

## Power Grids

Energy generation, distribution, storage and consumption – the energy transition requires the cooperation of all the players. WAGO helps link all the participants in the energy system together intelligently: energy generators, plant operators and industrial customers alike. With this approach, we can prevent blackouts, ensure a secure supply of power and help shape the energy transition.



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## Building Automation

WAGO's building control helps you to exploit untapped potential to save energy and increase performance, meet legal requirements and maximize comfort. To do so, WAGO offers open, manufacturer-independent systems. Our focus: easy integration, open communication, integrated management and applications that span multiple building systems – for sustainable solutions at every stage of the building lifecycle.



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# Applications

## Process Industry

To react quickly to changing market requirements, the process industry must have modular systems. WAGO's solution goes by the name of DIMA (Decentralized Intelligence for Modular Applications). DIMA combines modularity and Industry 4.0 approaches to create a profitable value-added process over the entire lifecycle of a system: for flexibility, speed and efficiency.



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## Marine and Onshore/Offshore Automation

Drive automation, auxiliary and deck machinery, navigation and communication: WAGO products for maritime and offshore applications automate almost every application on board. Our certified durable components for use at sea perform even under the toughest environmental conditions. From the bridge to the engine room, WAGO provides automation and reliable connections.



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### The Benefits for You at a Glance:

- Flexible components for various application domains
- Intelligent, networked and cost-optimized
- More than 60 I/O modules and six controllers for use in harsh environmental conditions
- Certified and safe

# Two Automation Platforms – the Right Choice for Everyone!

WAGO users can work with either the WAGO OS embedded Linux platform or ctrlX OS, which was developed jointly with Bosch Rexroth. Both allow connection of all common bus and network protocols and integration of open source packages and offer both real-time-capable

and event-based components. This gives WAGO customers the best possible operating system for every application and environment.



## Open, Flexible and Secure: Engineering with WAGO OS

The WAGO OS Linux®-based open source platform integrates OT and IT. It includes software and hardware solutions and, thanks to the support of the open source community, offers a high degree of flexibility with a compelling price–performance ratio.

Using an open source approach, users can integrate their own projects, as well as numerous tools from WAGO's "Software Development Kit" (SDK). Examples of the latter include ready-made CODESYS libraries and Docker® containers. For even greater flexibility, more than 500 I/O modules can be selected from the WAGO I/O System 750 for integration.

WAGO OS is available as the operating system for all products in the WAGO family. It lets you program in C, Node-RED or C++ and all programming languages supported by Linux®.

Continuous further development and maintenance by WAGO guarantees a future-proof code base. IEC 62443-1 cybersecurity standards are also being gradually integrated into WAGO OS, so the platform supports protection of industrial systems across all boundaries.

### The Benefits for You at a Glance:

- Integration of OT and IT
- Ready-made CODESYS libraries and Docker® containers
- Integrate your own projects with open source
- Good price–performance ratio

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## Independent, Linux®-Based, Flexible: ctrlX OS in Use at WAGO

By combining the OT and IT sides, the Linux®-based ctrlX OS overcomes earlier limitations, giving users more leeway. At its heart lies a shared data exchange layer that makes selected data available centrally for integration with other apps. Thanks to the microservices architecture, modules can be swapped out as needed while the structure remains unchanged. The data layer connects the microservices and hardware seamlessly.

ctrlX OS offers high connectivity for real-time and non-real-time applications at all automation levels: cloud, edge devices, fieldbus and open interfaces like REST, OPC UA and Pub/Sub. This flexibility minimizes integration effort.

Users also benefit from the open programming environment and access to the ecosystem based on ctrlX OS. A variety of apps are available in the ctrlX OS Store directly from WAGO or other vendors. You can also integrate your own apps. In addition to CODESYS, tools like logi.CAD, NodeRED, Blockly and Python are also available.

For IoT solutions, smart factories, mechanical engineering and more, ctrlX OS offers uniform IEC 62443-4-1 cybersecurity across all industries and enables secure networking and remote control. Developers can use the WAGO Edge Controller 400 or the WAGO Edge Computer with ctrlX OS or WAGO OS.

### The Benefits for You at a Glance:

- Shorter time to market
- Easy connection of all common bus and network protocols
- Free choice of programming environment (from high-level language to no-code)
- Custom use thanks to integrated ecosystem

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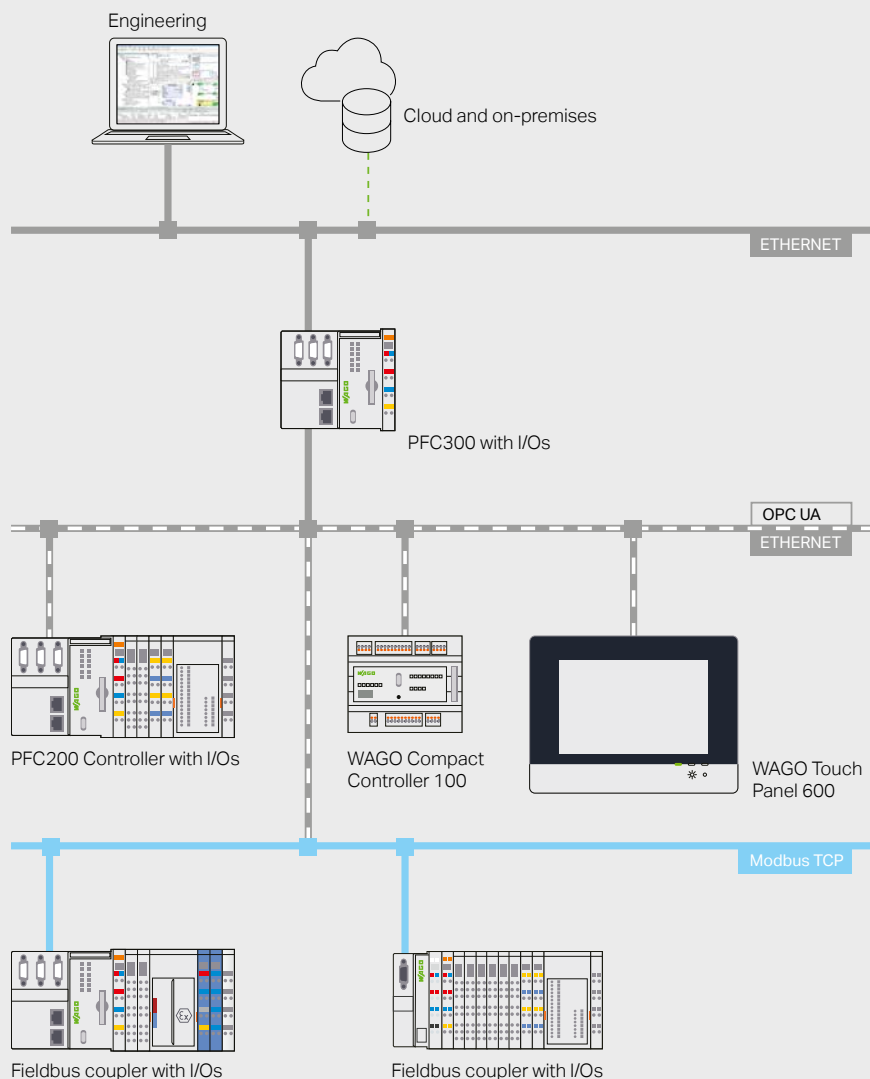
# Flexible and Compact: WAGO Controllers are the Best Choice for Every Application

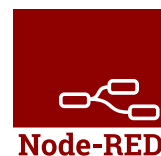
WAGO offers programmable logic controllers (PLC) in various performance classes for any automation control needs in both centralized and decentralized applications. For decentralized control, WAGO's controllers can be incorporated into most common fieldbus networks and record all field signals via I/O modules.

The WAGO controllers (programmable according to IEC 61131-3) offer cost-efficient automation solutions for numerous applications thanks to their high performance, low power consumption, numerous interfaces, compact design and high level of safety.

The WAGO I/O System 750's design makes it particularly flexible. With the same profile as a fieldbus coupler, it can

serve as a one-to-one replacement. Direct connection of different I/O modules also allows implementation of complex application architectures. In addition to the different performance classes, from the WAGO Basic Controller 100, to the WAGO Compact Controller 100, to the PFC300, the controllers offer multiple communication services and interfaces based on their scalable memory size and speed. The example illustration shows how a complex application can be structured on multiple levels with compatible WAGO components (controllers, I/O systems, Edge Devices and Touch Panels) and various communication protocols. Thanks to universal component compatibility and a modular design, the systems can be scaled according to your requirements – from small, low-cost applications, to complex automation systems.





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WAGO controllers are technology-independent, support all common fieldbus protocols and offer flexible expansion thanks to embedded Linux. The technology standards WAGO uses ensure optimal compatibility for all users, both now and in future: With CODESYS, users can program hardware from different manufacturers in IEC 61131-3 PLC programming languages (ST, FBD, LD, IL and AS), as well as in CFC. CODESYS supports the Modbus®, EtherCAT® and Ethernet/IP™ protocols, among others. WAGO controllers also support Docker® virtualization technology, which makes applications portable, allows rapid use of tools like Node-RED and is therefore ideal for flexible IoT applications.

WAGO's IO-Link-capable devices support all common fieldbus systems, as well as communication solutions like OPC UA and MQTT. Thus they allow reliable, manufacturer-independent data exchange between the sensor and control level and advanced interoperability. Of course, WAGO components also offer Single Pair Ethernet (SPE), combining data transfer and power supply to save space.

WAGO controllers support the BACnet® and DALI protocols commonly used in building automation. They can also be extended with special telecontrol protocols (IEC 61850, IEC 60870, DNP3 and Modbus®) to enable flexible solutions in energy automation. In combination with the option of IEC 61131-3 programming, this allows easy, flexible implementation of all telecontrol communication and station automation tasks.

# Microcontroller for Real-Time Projects:

## WAGO Basic Controller 100

For Your Application



The WAGO Basic Controller 100 with Cortex A8 processor (600 MHz) runs on the Nucleus real-time operating system and uses CODESYS according to IEC-61131-3. The integrated standard editors (FBD, LD, ST and AS) make it easy to create large-scale applications. The WAGO Basic Controller 100 supports object-oriented programming and HTML5-based Web visualization, as well as the OPC UA Client/Server/PubSub, Modbus TCP Master/Slave, EtherNet/IP™ Master/Slave and MQTT communication protocols. It has role-based user management and supports the following encryption protocols: TLS1.3, syslog in accordance with RFC 5424, SFTP and https.

Two ETHERNET interfaces, a DIP switch, an integrated Webserver and user management come standard. The 750-8001 model also has a slot for an SD card and an integrated power supply module. With over 500 different I/O modules, users can customize the WAGO Basic Controller 100 to their individual needs, making it ideal for industrial use in small applications.

### The Benefits for You at a Glance:

- Programmable via CODESYS
- HTML5 Web visualization
- Syslog RFC 5424 + role-based user management
- SD slot, optional

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# Flexible Control for Small Applications: PFC100



## For Your Application



The PFC100 offers at least two ETHERNET connections, plus additional interfaces depending on the version. The CANopen®, PROFIBUS DP, Modbus TCP/UPD/RTU, PROFINET®, EtherNet/IP™ and EtherCAT® protocols support connection to fieldbuses and I/O devices. Users can configure them directly in CODESYS V3 and take advantage of the Web-based visualization. HTTP, SNMP, SSL/TLS, SNMP, FTP, BootP, DHCP, DNS, Telnet, SSH, VPN and an integrated firewall ensure secure integration into the IT environment. Thanks to Embedded Linux, the PFC100 supports open-source expansion. It also offers plenty of storage space (internal flash memory + microSD card slot, depending on the model).

### The Benefits for You at a Glance:

- Embedded Linux
- Wide variety of interfaces
- IoT-ready
- Highest security standards

With the library functions for email, SOAP, ASP, IP configuration, ETHERNET sockets and the file system, the PFC100 becomes an IoT controller that sends data from the field level to the cloud. Standardized protocols per IEC 60870-5, IEC 61850, IEC 61400-25 and DNP3 allow use in telecontrol technology.

The PFC100 meets the highest standards (e.g., ATEX, BR-Ex, IECEx, UL508, UL ANSI/ISA and AEx) for demanding environmental conditions.

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# The Compact Controller with On-Board I/Os for Small Automation Tasks:

## WAGO Compact Controller 100

### For Your Application



The WAGO Compact Controller 100 is based on WAGO OS with real-time Linux®. It has a Cortex A8 processor (650 MHz) and large memory capacity (4 GB flash memory, 512 MB of RAM and optional microSD card slot). The controller can be freely programmed with CODESYS per IEC 61131, but can also be used for IEC 61131-independent engineering (e.g. Node-RED, Python and C++). If you install Docker® as a virtualization environment on the device, you can use it as a full-fledged IIoT device. Thanks to HTML5, users can customize the user interface themselves and view it in the Web browser at any time.

The WAGO Compact Controller 100 offers comprehensive security functions with an integrated firewall, VPN support and encryption via SSH and SSL/TLS. It supports various fieldbus and industrial Ethernet protocols, including Modbus, TCP/UDP, EtherNet/IP™ and EtherCAT®. It also has two configurable RJ45 ETHERNET ports and numerous digital and analog connections.

Thanks to its design (DIN-rail built-in installation device per DIN 43880), it can also be installed on small distribu-

tion boards. The I/O unit is housed in a compact enclosure along with the controller, which saves space. It can be connected to a fieldbus coupler from the WAGO I/O System 750 if an additional I/O is required.

Various versions of the WAGO Compact Controller 100 are available. In the variant with configurable I/Os (multi-I/O), users can freely choose whether to use specific channels as inputs or outputs. The controller with multi-I/Os has a more powerful dual-core processor and an additional RS-485/RS-232 interface. Thanks to an optional mains filter, the WAGO Compact Controller 100 also features more robust electrical properties. WAGO also offers a version of the Compact Controller 100 with CAN and an integrated DALI line for lighting automation applications. In this version, the controller has preloaded applications for building automation, making it a custom-configurable lighting management system.

### The Benefits for You at a Glance:

- Compact controller with on-board I/Os in a DIN rail-mount enclosure
- Real-time Linux
- Programmable in CODESYS and Node-RED
- IIoT-ready

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# Powerful Control for Medium-Sized Applications: PFC200

## For Your Application



With the PFC200 Series, WAGO has expanded the functional scope of the PFC100, especially in terms of interoperability. The PFC200 can also be easily connected to a cloud. The PFC200 Series includes many different models, so it offers the right number and type of interfaces for any application requirement. Two configurable RJ45 ETHERNET ports always come standard.

The 750-8217 model, for example, also offers a 4G mobile wireless modem, including radio approval for EU countries, for a wireless Internet connection. The 750-8211

model provides two SFP ports suitable for fiber optic transmission; these are especially useful in substations/transformer stations.

Of course, the PFC200 also includes all the advantages of the PFC100, such as the powerful Cortex A8 600 MHz processor, the large memory capacity (512 MB of RAM and 4 GB of flash memory), the real-time Linux® operating system, the integrated security packages, the CODESYS environment with Web visualization and the Docker® interface.

### The Benefits for You at a Glance:

- A variety of models and interfaces
- Remote access via mobile communication
- Ports for SFP modules
- Highest security standards

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# For Extreme Environments: XTR Controllers

## For Your Application



The PFC200 XTR specializes in extreme environmental conditions: Very cold temperatures (down to  $-40^{\circ}\text{C}$ ) have no negative impact on the controller; nor do temperatures up to  $+70^{\circ}\text{C}$ . Thanks to the PCB's conformal coating, it also functions faultlessly up to an altitude of 5,000 m above sea level, even under the influence of corrosive gases. Further advantages of the XTR controller include immunity to impulse voltages up to 1 kV, lower EMC interference emissions and increased insensitivity to EMC interference. In addition, the PFC200 XTR is vibration-resistant and offers fault-free operation, even for applications like tunnel excavation. This makes it the first choice for demanding applications like shipbuilding, the onshore/offshore industry, energy, water and other infrastructure systems, etc..

PFC200 XTR variants can also be used as telecontrollers, since they support the relevant standards and protocols.

Of course, the XTR version also offers all the advantages of the standard PFC200 system. A wide variety of interface options are available with two configurable RJ45 ETHERNET ports and, depending on the variant, an additional 4G modem or SFP ports. Thanks to HTTP, SNMP, SSL/TLS, SNMP, FTP, BootP, DHCP, DNS, Telnet, SSH, VPN and an integrated firewall, the PFC200 XTR meets the highest security standards. The real-time Linux® operating system, the CODESYS environment with Web visualization and the Docker® interface provide an optimal engineering environment.

### The Benefits for You at a Glance:

- Temperature resistant
- Resistant to impulse voltage and insensitive to interference
- Vibration resistant
- Corrosion resistant

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# Power and Flexibility for Medium to Large Applications: PFC300

## For Your Application



With its large 2 GB memory and the powerful 64 bit dual-core processor, the PFC300 can control and regulate larger applications where other controllers would run up against performance limits. Typical applications include the process industry and building automation, as well as conventional mechanical engineering.

The controller has two Gigabit ETHERNET ports and an RS-485 interface with a terminating resistor that can be set via software. The PFC300 can communicate with external devices (e.g., energy meters) via a Modbus RTU interface. A USB-C interface is also available for application and firmware updates or integration.

Manufacture-independent IEC programming of the controller is possible via CODESYS per IEC 61131-1 or via the Web-based management interface. It runs on an open Linux® operating system with RT preemption patch and has extensive security functions. The PFC300 is also Docker®- and cloud-capable, supporting integration of third-party applications. This makes the PFC300 future-proof and a good choice for more than just conventional PLC applications.

### The Benefits for You at a Glance:

- Powerful 64 bit dual-core processor with 2 GB of RAM
- Open Linux® real-time operating system
- USB-C port
- Docker®- and cloud-capable

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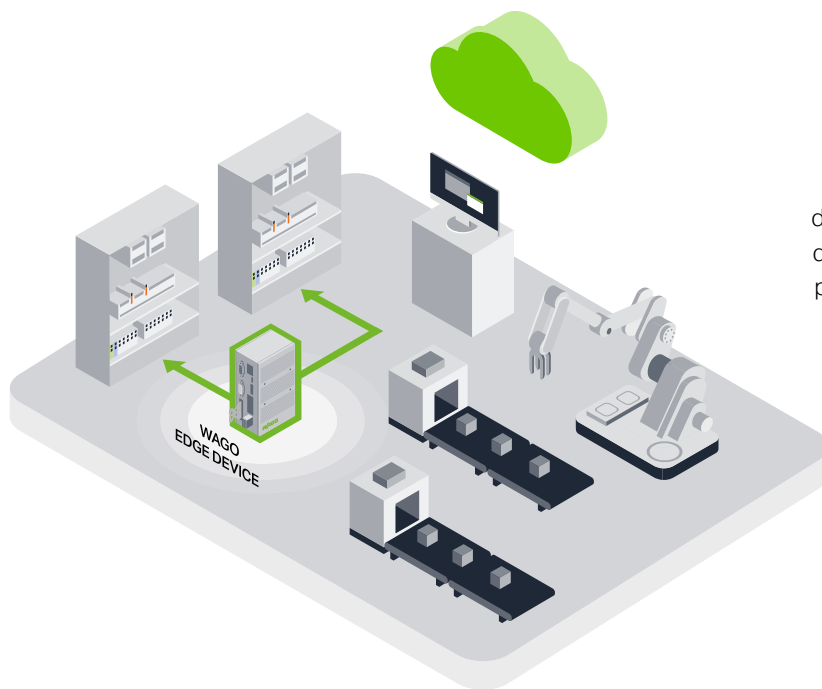


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# From the Cloud Straight to the Machine – with WAGO Edge Devices

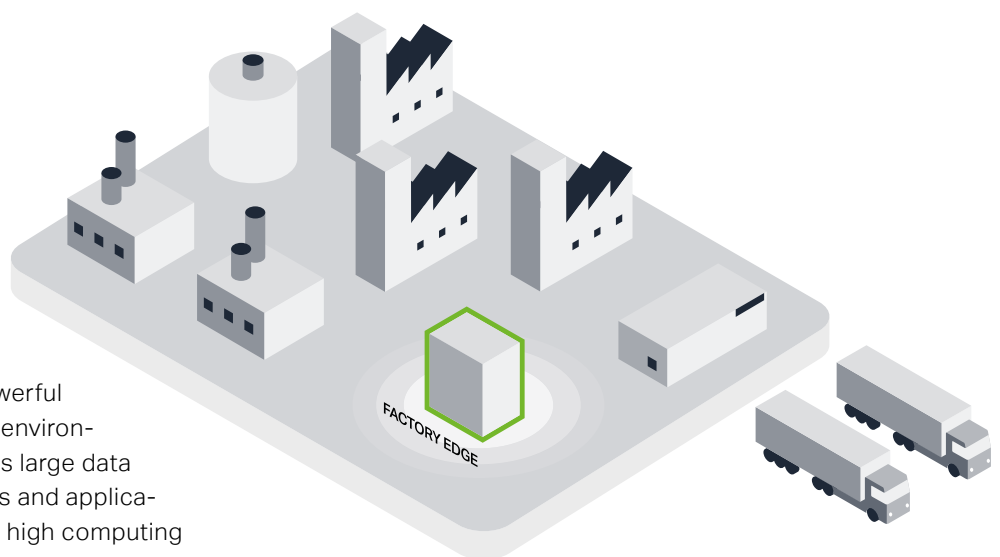
Transferring data from machines directly to a cloud is often too resource-intensive, especially in complex applications with real-time data processing. Furthermore, intelligent processes require data analysis and computing power right in the field. The solution is edge computing, combining the advantages of cloud computing with those of a local network architecture.

With its portfolio of Edge Controllers and Edge Computers, WAGO offers the option of processing and evaluating data right on the machine, displaying it graphically and sending it to the cloud. WAGO Edge Devices run on Linux®, making them ideal for cybersecurity.



## Control Cabinet Level

The graphic shows how a WAGO Edge Device combines data from different machines and applications. Depending on the algorithm, the data is aggregated or pre-processed there. The device then reports the information back to the production facility (smart factory) or forwards it to a server, a display or a cloud.



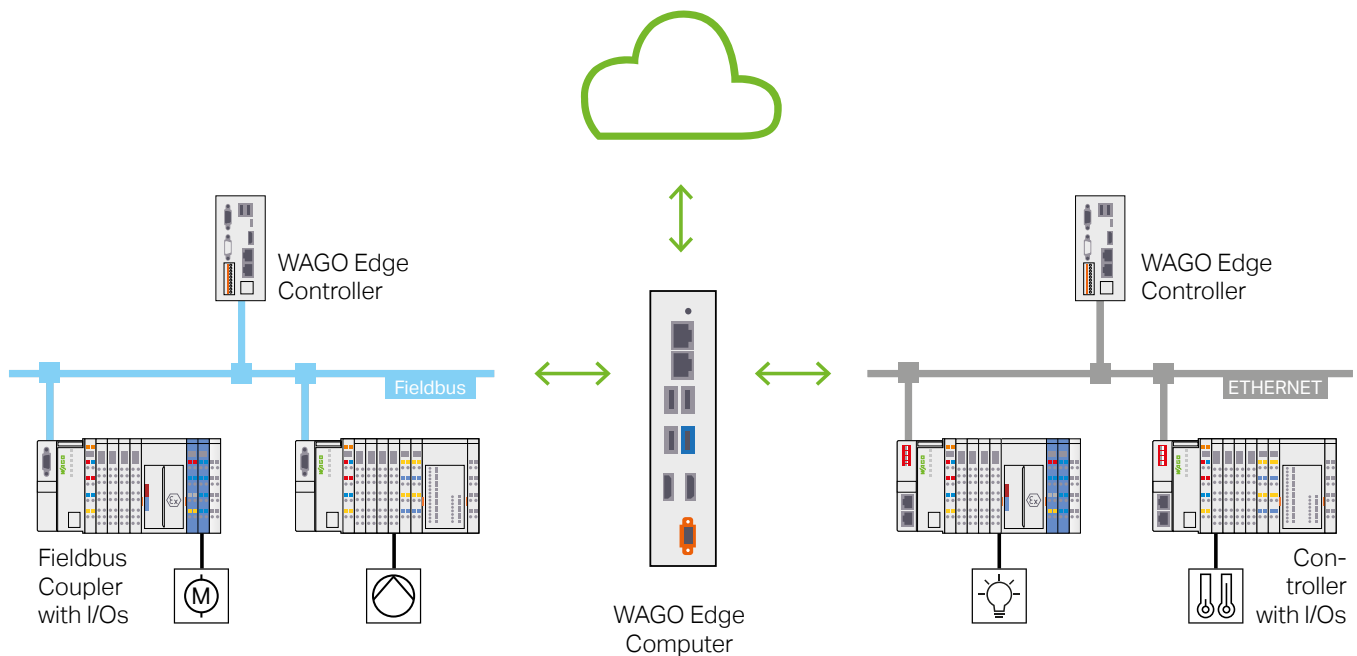
## Production Level

The illustration shows how a powerful WAGO Edge Device in a factory environment can aggregate and process large data volumes from different machines and applications right in the field. Thanks to high computing power, numerous interfaces and high cybersecurity, information is channeled and passed on efficiently: as feedback to production, to the cloud or – via secure VPN connection – to other locations.



Where demands on computing power and memory are high, the powerful but compact WAGO Edge Computer provides cloud functionality right on the machine – saving space and money, conserving resources and ensuring security. The WAGO Edge Controllers collect data from sensors via integrated interfaces or fieldbus couplers and send it – for instance, via OPC UA – to the cloud or the Edge Computer in the control cabinet for preprocessing.

The data is then passed on from there to the cloud or a local server. Thanks to its large variety of interfaces, the WAGO Edge Controller can also be used as a standalone controller or standalone edge device; it can also interact directly with the cloud.



The illustration shows the interaction between various I/O devices (here: a motor, a pump, a light and hot water) acting as sensors and/or actuators and how these are integrated into the overall system (here: building automation) using WAGO Edge Controllers and WAGO Edge Computers.

As interfaces between the I/O devices and the central network, the WAGO Edge Controllers process the data in real time, compress it according to locally defined criteria and then send it to the WAGO Edge Computer or the cloud. This allows initial analysis results to be fed back directly to the I/O devices or processed further.

# Power for Complex Automation Demands: WAGO Edge Controller

## For Your Application



The WAGO Edge Controller is equipped with an ARM Cortex A9 quad-core processor and has two ETHERNET port, one CANopen® interface, two USB ports, one serial interface and four digital ports for connecting local I/O devices.

Thanks to its compact design, the WAGO Edge Controller can be mounted horizontally or vertically on a DIN-rail, saving space. Users can program it in CODESYS V3.5 and can also use Docker® containers. The WAGO Edge Controller can be provided with additional licenses for connection

to BACnet® or EtherCAT®. Data can be transferred to the cloud via MQTT.

Thanks to the DNV marine certificate, the WAGO Edge Controller is also approved for use in shipbuilding and onshore/offshore applications.

### The Benefits for You at a Glance:

- Easy integration into existing systems
- Space-saving installation on DIN-rail
- Numerous interfaces and protocols
- Use in maritime applications thanks to DNV marine certificate

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# For High Demands on Computing Power and Storage Space: WAGO Edge Computers

## For Your Application



WAGO Edge Computers are able to meet high demands on computing power and storage space. Depending on the variant, they are powered by either an Intel® quad-core Atom or i7 processor. Multiple USB ports and ETHERNET ports, an HDMI port and a display port are available for data transfer and communication. With up to 16 GB of RAM and up to 256 GB of flash memory, depending on the variant, they can be used in even more complex projects. A 2.5" SSD drive provides the option of memory expansion. Despite their high computing power and temperature resistance from -20 °C to +60 °C, all WAGO Edge Computer

versions do without fans, allowing a compact design and DIN-rail mounting.

Thanks to the pre-installed operating system (Debian-Linux®; optionally: ctrlX OS) and the use of standard software, the commissioning process runs smoothly. The open ctrlX OS also provides access to the expertise of external ctrlX World partners. UEFI Boot Secure and a TPM 2.0 chip ensure data security.

### The Benefits for You at a Glance:

- Can be used with standard software
- Powerful processor and large memory
- Quick commissioning via pre-installed operating system
- High security thanks to TPM 2.0 chip and UEFI Boot Secure

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# Expansion Housings and Modules for Maximum Flexibility

## For Your Application



The new expansion housings and modules complement the WAGO Edge Computer perfectly. The WAGO Edge Computer comes with an Atom processor and can be equipped with one expansion module; the WAGO Edge Computer comes with an i7 processor and can be equipped with up to two expansion modules. This allows for customized configurations.

Every expansion module features two interfaces; for I/O expansion. WAGO provides RS-232, RS-422/-485 and

ETHERNET interfaces. Modules with CAN®, EtherCAT®, PROFINET® or EtherNet/IP™ are available for fieldbus expansion. Thanks to the expansions, the WAGO Edge Computer offers the right interface for any custom solution, ensuring maximum flexibility across various applications. Users familiar with the unexpanded version of the WAGO Edge Computer will find the handling and commissioning just as straightforward.

### The Benefits for You at a Glance:

- Custom configuration of the WAGO Edge Computer
- Maximum flexibility thanks to modularity
- Customizable interface selection
- Easy commissioning

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# Flexible Connections with the WiFi and LTE Kit for WAGO Edge Computers



## For Your Application



WAGO now also offers WiFi and LTE kits for WAGO Edge Computers equipped with an Atom processor.

Two versions of the WiFi kit are available: The first is designed for normal ambient temperatures from 0 to +70 °C, the second for an extended temperature range from -40 to +85 °C. The Wi-Fi kits also support new standards such as Wi-Fi 6 and 6e and offer even greater flexibility in applications like factory automation.

The LTE kit is ideal for decentralized applications, such as those found in solar power stations. Even in environments with poor network infrastructure, LTE supports straightforward network connection and an optimal cloud connection, for example.

Thanks to CE and FCC certification, both the WiFi and the LTE kits meet the requirements of the European and American markets.

### The Benefits for You at a Glance:

- Wireless connection for maximum flexibility
- Fast data transmission thanks to new WiFi 6/6E standards
- LTE connectivity even with inadequate network infrastructure
- CE and FCC certifications for European and US markets

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## Operation and Visualization: The Right HMI for Every Application

Two WAGO Touch Panel product families are available: the Web Panel 400 and the Touch Panel 600. Both feature a Linux real-time operating system with RT preemption patch. The Web Panel 400 functions as a flexible HMI and boasts a high-quality design and continuous display, offering a cost-effective visualization solution. The Touch Panel 600, the premium version, meets the highest demands on interface variety and is available in different function classes, equipment variants and screen sizes.

For all WAGO HMIs, high-quality visualizations based on modern technologies like HTML5 can be created with CODESYS during project planning. Once visualizations have been created, they can also be displayed in parallel on different platforms (e.g., a PC or Web browser) – with an

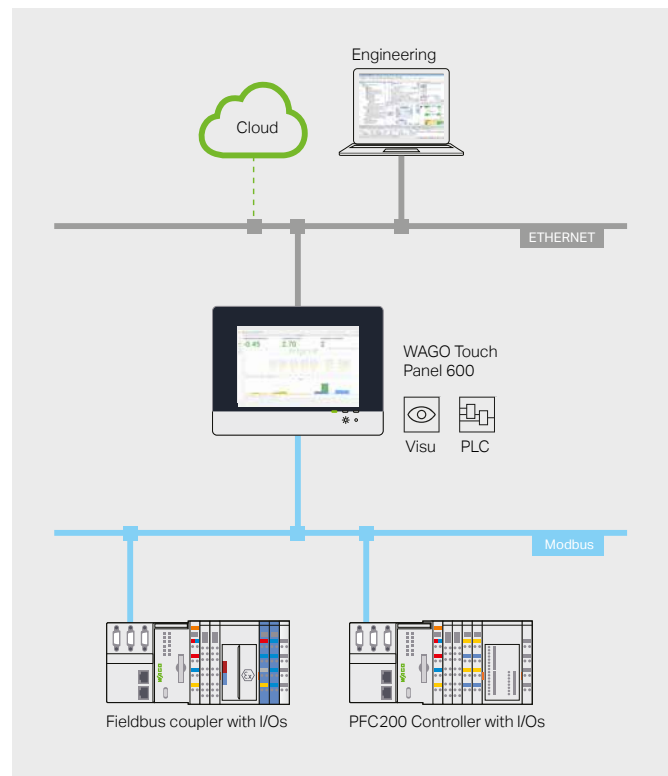
easy mouse-based interface. Since the devices are Docker®-ready; users can also install open source visualization software like Grafana.

With their robust aluminum housing, the Touch Panels can be snapped directly into the control cabinet using mounting clips. Thanks to custom-developed clamps, the front of the display is able to meet IP65 protection class standards. The VESA mount also allows installation on a swivel arm or a stand outside the control cabinet.



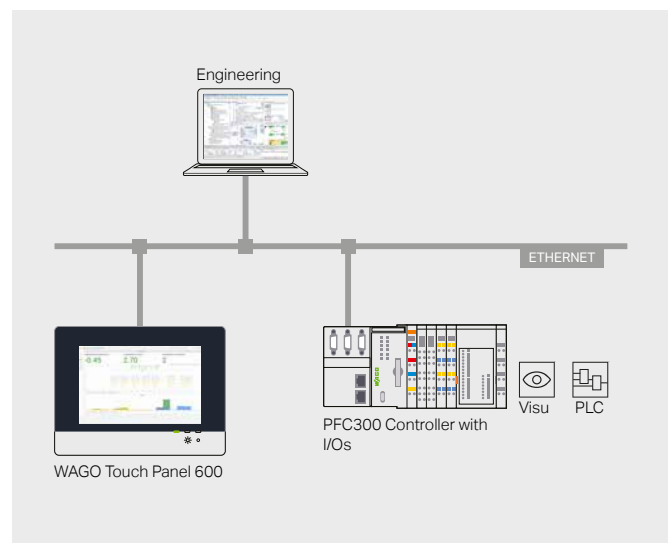
### Web Panel

The Web Panel version of the WAGO Touch Panel 600 and the WAGO Web Panel 400 can use standard Web protocols to access controllers with an integrated Web visualization and provide a high-resolution display of this visualization in the browser. The visualizations can be created with CODESYS and use HTML5. The WAGO Web Panel 400 has one ETHERNET port and one USB 2.0 port, while the WAGO Touch Panel 600 has two ETHERNET ports and two USB ports.



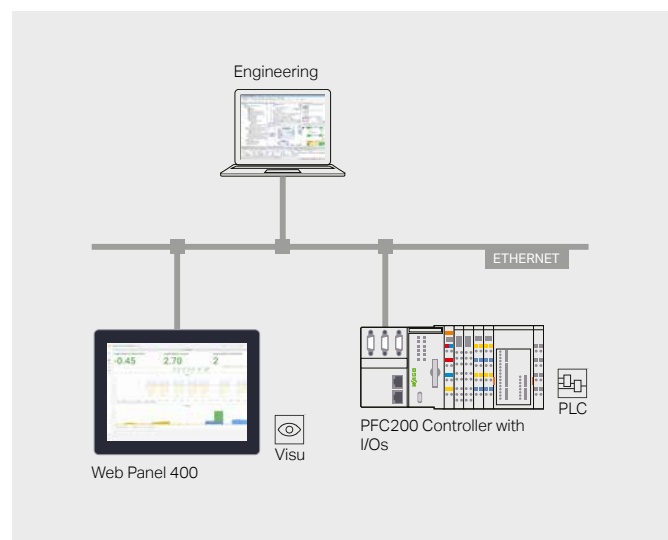
### Visu Panel

In the Visu Panel version, the WAGO Touch Panel 600 are able not only to visualize fieldbus data, but also to reduce the controller's workload by fetching the referenced data from any field devices – using Modbus TCP, for example – evaluating it in real time and reporting it back to the visualization. In addition to the Web Panels' ETHERNET and USB ports, the Visu Panels are equipped with an audio output. Thus Visu Panels are able to handle simple control tasks.



### Control Panel

The Control Panel version of the WAGO Touch Panel 600 combines control and visualization in one device. Using a dedicated library, WAGO's Control Panels become IoT controllers that send data from the field level to the cloud. Control Panels have the following ports in addition to the Visu Panel's interfaces: CAN, RS-232/-485 and four digital inputs/outputs. Compared to the Visu Panel, the Control Panel has a second interface level, as well as retain memory that can save variables in the event of a power failure.

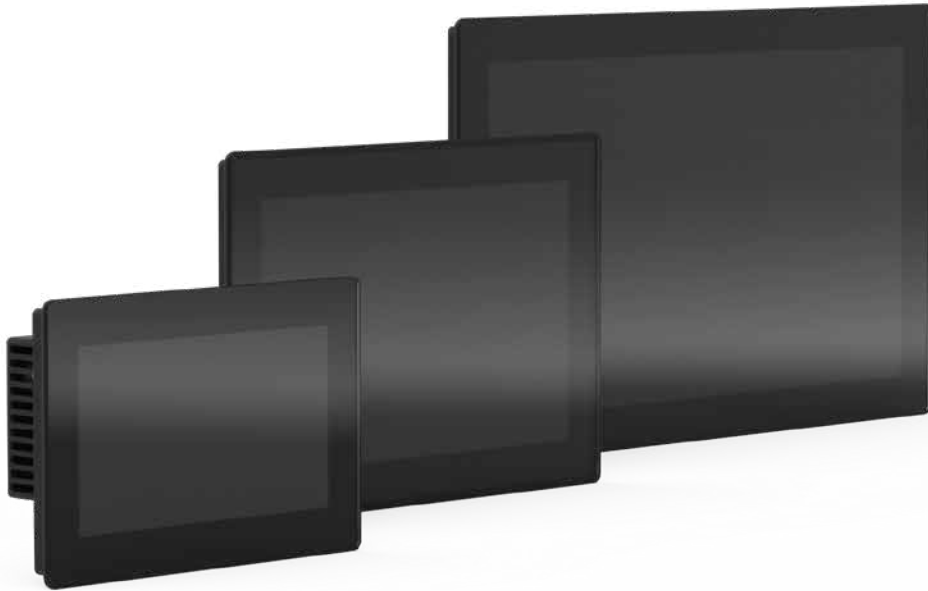


# Design Meets Technology:

## WAGO Web Panel 400

An Economical Solution for Demanding Performance

### For Your Application



The WAGO Web Panel 400 is ideal for CODESYS Web visualizations, as well as more complex visualizations based on open source solutions such as Grafana etc. The HMI runs on an ARM Cortex-A53 quad-core processor (4 × 1.6 GHz).

Power is supplied either via a 24 V connection or via Power-over-Ethernet (PoE), allowing users to operate the device from any location. An additional memory card slot can be used for optional storage capacity expansion.

The WAGO Web Panel 400 boasts a high-quality design. A continuous glass front, in combination with the bonded display, ensures a razor-sharp image and minimizes glare. The PCAP touch technology it uses allows multi-touch gestures like zooming. This economical HMI offers excellent operability along with high-performance visualization. The WAGO Web Panel 400 is available in three screen sizes: 7.0", 10.1" and 15.6".

#### The Benefits for You at a Glance:

- Custom configuration of the WAGO Edge Computer
- Maximum flexibility thanks to modularity
- Customizable interface selection
- Easy commissioning

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# Attractive Design Meets High Performance: WAGO Touch Panel 600

## For Your Application



WAGO offers the WAGO Touch Panel 600 in three product families with different hardware configurations: Standard Line devices, with resistive touch, which are suitable for applications in control cabinets; the multi-touch-capable Advanced Line devices, with a glass surface, for applications with higher hygiene standards, such as in the food and beverage sector; and Marine Line devices for use in shipbuilding. In addition, WAGO offers three different hardware configurations for the WAGO Touch Panel 600: Web Panel, Visu Panel and Control Panel. None of the variants require fans or batteries, making them all maintenance-free.

Furthermore, all WAGO Touch Panels are available with powerful Cortex-A9 multi-core processors. The devices

are equipped with the future-proof Linux® operating system and are offered Docker®-ready. Depending on the hardware configuration, the WAGO Touch Panel is available with a wide range of interfaces: ETHERNET ports can be used for networking with field devices and the engineering tool, and USB ports for optionally connecting USB stick, a mouse or a keyboard. Touch Panels come in screen sizes from 4.3" to 21.5". All Touch Panels have integrated proximity sensors to control the energy-saving standby function. Thanks to the 2,048 MB main memory (RAM) and 4,096 MB internal flash memory, as well as a micro SD slot (max. 2 GB) and micro SDHC slot (max. 32 GB), they offer large storage capacity. SSH and SSL/TLS ensure cybersecurity, and firewall provides additional protection against unwanted access.

### The Benefits for You at a Glance:

- Available in Standard, Advanced and Marine Line for different applications
- Wide range of interface selections
- Different screen sizes depending on the variant
- Hardware equipment for use as a Web Panel, Visu Panel or Control Panel

### Keep up to date at all times:



WAGO Website



WAGO eShop

# WAGO Controllers

	Item Number	CPU	Fieldbus Protocols							
			Ether-Net/IP™	Mod-bus®	PROF-INET®	PROFI-BUS®	Ether-CAT®	CAN-open®	OPC UA	DALI
<b>WAGO Basic Controller 100</b>	750-8000	32 bit/600 MHz	FW04	×					FW03	
	750-8001	32 bit/600 MHz	FW04	×					FW03	
<b>WAGO Compact Controller 100</b>	751-9301	32 bit/650 MHz	×	×	×		×		×	
	751-9401	2 × 32 bit/650 MHz	×	×	×		×	×	×	
	751-9402	2 × 32 bit/650 MHz	×	×	×		×		×	
	751-9403	2 × 32 bit/650 MHz	×	×	×		×	×	×	×
<b>PFC100</b>	750-8110	32 bit/600 MHz	×	×	×		×		×	
	750-8111	32 bit/600 MHz	×	×	×		×		×	
	750-8112	32 bit/600 MHz	×	×	×		×		×	
	750-8112/025-000	32 bit/600 MHz	×	×	×		×		×	
<b>PFC200</b>	750-8208	32 bit/600 MHz		×		×		×	×	
	750-8208/025-000	32 bit/600 MHz		×		×		×	×	
	750-8210	32 bit/1000 MHz	×	×	×		×		×	
	750-8210/025-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8211	32 bit/1000 MHz	×	×	×		×		×	
	750-8212	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/025-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/025-001	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/000-100	32 bit/1000 MHz	×	×	×		×		×	
	750-8213	32 bit/1000 MHz	×	×	×		×	×	×	
	750-8214	32 bit/1000 MHz	×	×	×		×	×	×	
	750-8215	32 bit/1000 MHz	×	×	×		×	×	×	
	750-8216	32 bit/1000 MHz	×	×	×	×	×	×	×	
	750-8216/025-000	32 bit/1000 MHz	×	×	×	×	×	×	×	
	750-8216/025-001	32 bit/1000 MHz	×	×	×	×	×	×	×	
	750-8217	32 bit/1000 MHz	×	×	×		×		×	
	750-8217/025-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8217/600-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8217/625-000	32 bit/1000 MHz	×	×	×		×		×	
<b>PFC200 XTR</b>	750-8210/040-000	32 bit/1000 MHz	×	×	×		×		×	
	752-8211/040-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8211/040-001	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/040-000	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/040-001	32 bit/1000 MHz	×	×	×		×		×	
	750-8212/040-010	32 bit/1000 MHz	×	×	×		×		×	
	750-8213/040-010	32 bit/1000 MHz	×	×	×		×	×	×	
	750-8216/040-000	32 bit/1000 MHz	×	×	×		×	×	×	
<b>PFC300</b>	750-8302	2 × 64 bit/1400 MHz	×	×	×		×		×	

		Other Application Protocols	Interfaces			Program Memory	Data Memory	Retain Memory	File System	Web- server	Web Visu	Target Visu
BAC- net®	Tele- control		ETHERNET	Serial	CAN							
			×			16 MB	16 MB	64 kB	1 GB	×	×	
			×			16 MB	32 MB	128 kB	1 GB	×	×	
License	License		×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License	License		×	×	×	32 MB	128 MB	128 kB	1.8 GB	×	×	
License	License		×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License	License		×	×	×	32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
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License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×		×	32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×	×	32 MB	128 MB	128 kB	1.8 GB	×	×	
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License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
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License			×			32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×		32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×		×	32 MB	128 MB	128 kB	1.8 GB	×	×	
License			×	×	×	32 MB	128 MB	128 kB	1.8 GB	×	×	
FW28			×	×		32 MB	512 MB	128 kB	17 GB	×	×	

# WAGO Edge Devices and WAGO Touch Panels

	Item Number	Size	CPU	Fieldbus Protocols					
				Ether-Net/IP™	Mod-bus®	PROF-INET®	PROFIB-US®	Ether-CAT®	CAN-open®
<b>WAGO Edge Controller</b>	752-8303/8000-002		ARM® Cortex® 32 bit 4 × 1000 MHz	×	×	×		×	×
<b>WAGO Edge Controller 400</b>	752-8400		ARM® Zync Ultrascale+ 64 bit 4 × 1.2 GHz					×	
<b>WAGO Edge Computer</b>	752-9400		Intel® Atom 4 × 1.91 GHz*						
	752-9401		Intel® Atom 4 × 1.91 GHz*						
	752-9412		Intel® Atom 4 × 1.50 GHz* (max. 3.00 GHz)						
	752-9800		Intel® i7 2 × 2.80 GHz* (max. 3.90 GHz)						
	752-9813		Intel® i7 4 × 1.80 GHz* (max. 4.40 GHz)						
<b>WAGO Expansion Module</b>	758-9011								
	758-9012								
	758-9013								
	758-9016								×
	758-9017			×		×		×	
	758-9018			×		×		×	
	758-9051								
	758-9052								
<b>WAGO Expansion Housing</b>	758-9053								
	758-9400								
	758-9800								
<b>WAGO Touch Panels 600 Standard Line</b>	762-4101	4.3"	4 × 32 bit/1000 MHz						
	762-4102	5.7"	4 × 32 bit/1000 MHz						
	762-4103	7.0"	4 × 32 bit/1000 MHz						
	762-4104	10.1"	4 × 32 bit/1000 MHz						
	762-4201/8000-001	4.3"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-4202/8000-001	5.7"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-4203/8000-001	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-4204/8000-001	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-4205/8000-001	15.6"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-4206/8000-001	21.5"	4 × 32 bit/1000 MHz	×	×	×		×	
<b>WAGO Touch Panels 600 Advanced Line</b>	762-4301/8000-002	4.3"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-4302/8000-002	5.7"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-4303/8000-002	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-4304/8000-002	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-4305/8000-002	15.6"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-4306/8000-002	21.5"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-5203/8000-001	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-5204/8000-001	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-5205/8000-001	15.6"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-5206/8000-001	21.5"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-5303/8000-002	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-5304/8000-002	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-5305/8000-002	15.6"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-5306/8000-002	21.5"	4 × 32 bit/1000 MHz	×	×	×		×	×
<b>WAGO Touch Panels 600 Marine Line</b>	762-6201/8000-001	4.3"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-6202/8000-001	5.7"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-6203/8000-001	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-6204/8000-001	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	
	762-6301/8000-002	4.3"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-6302/8000-002	5.7"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-6303/8000-002	7.0"	4 × 32 bit/1000 MHz	×	×	×		×	×
	762-6304/8000-002	10.1"	4 × 32 bit/1000 MHz	×	×	×		×	×
<b>WAGO Web Panels 400</b>	762-3403	7.0"	4 × 64 bit/1600 MHz						
	762-3404	10.1"	4 × 64 bit/1600 MHz						
	762-3405	15.6"	4 × 64 bit/1600 MHz						

\* Adding virtual CODESYS Runtime allows use of various protocols.



			Other Com- munication Technologies	Interfaces			Program Memory	Data Memory	Retain Memory	File System	Webserver	Web Visu	Target Visu
OPC UA	BAC- net®	Telecon- trol		ETHER- NET	Serial	CAN							
×	License	License		×	×	×					×	×	×
				×							×		
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