

WAGO-PERSPECTO® 762 WP 35 QVGA 762-1035 PERSPECTO® WP - Web Panel

Version 1.3.0



© 2012 by WAGO Kontakttechnik GmbH & Co. KG All rights reserved.

WAGO Kontakttechnik GmbH & Co. KG

Hansastraße 27 D-32423 Minden

Phone: +49 (0) 571/8 87 - 0 Fax: +49 (0) 571/8 87 - 1 69

E-Mail: info@wago.com

Web: <u>http://www.wago.com</u>

Technical Support

Phone:	+49 (0) 571/8 87 - 5 55
Fax:	+49 (0) 571/8 87 - 85 55

E-Mail: <u>support@wago.com</u>

Every conceivable measure has been taken to ensure the accuracy and completeness of this documentation. However, as errors can never be fully excluded, we always appreciate any information or suggestions for improving the documentation.

E-Mail: documentation@wago.com

We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present manual are generally protected by trademark or patent.



Table of Contents

1	Notes about this Documentation	5
1.1	Scope of Validity	5
1.2	Copyright	5
1.3	Symbols	6
1.4	Number Notation	8
1.5	Font Conventions	8
2	Important Notes	9
2.1	Legal Bases	9
2.1.1	Subject to Changes	9
2.1.2	Personnel Qualification	9
2.1.3	Use of the 762 Series in Compliance with Underlying Provisions	. 10
2.1.4	Technical Condition of Specified Devices	. 10
2.2	Safety Advice (Precautions)	. 11
2.3	Characteristics of the CoDeSys Web visualization	. 13
2.3.1	Description of the Function "CookieHandling()"	. 14
3]	Device Description	. 15
3.1	PERSPECTO WP Web Panel	. 15
3.2	View	16
3.2.1	Front View	. 16
3.2.2	Back view	. 17
3.3	Connectors	. 18
3.3.1	X1 – Supply Voltage	. 18
3.3.2	X6 – Ethernet Interface	. 19
3.3.3	X8 – USB Interface	. 20
3.4 2.5	Battery Case	. 21
3.5	Slot for Memory Card	. 22
3.0	Service Dutton	. 23
5.0.1 2 7	Technical Data	. 23
3.7 3.7.1	Housing	24
3.7.1	Power Supply	24
373	Display	24
3.7.4	Hardware	25
3.7.5	Software	. 25
3.7.6	Interfaces	. 25
3.8	Approvals	. 26
3.9	Standards and Guidelines	. 26
4]	Mounting	. 27
4.1	Front Panel Installation	. 27
5	Connect Devices	. 29
6	Commissioning	. 30
61	Switch on	30
6.2	IP address of the device	31
6.2.1	General	31
~· — ·1		~ 1



< a a		
6.2.2	Setting the IP Address	
6.2.3	IP Address	32
6.3	The WAGO Control Center	33
6.3.1	Starting the WAGO Control Center	33
6.3.2	"General" Tab	34
6.3.3	"Autostart Applications" Tab	35
6.3.4	"Users" Tab	36
6.3.5	"FTP" Tab	37
6.3.6	"HTTP" Tab	38
6.3.7	"RAS" Tab	39
6.3.8	"Backup/Restore" Tab	40
6.3.9	"Advanced" Tab	41
6.3.9.1	Read memory consumption	41
6.3.10	Saving the Configuration	42
6.4	Optimizing Web Visualization	43
6.4.1	Starting the Java Virtual Machine as an Applet Viewer	43
6.4.2	Starting Internet Explorer in Full-Screen Mode	43
6.4.3	Adjustments in the WEBVISU.htm of the Controller	44
7 S	ervice	45
71	Battery Maintenance	45
/.1		
List of	Figures	46
List of	Tables	47



1 Notes about this Documentation

The WP 35 QVGA 762-1035 shall only be installed and operated according to the instructions in these operating.

Note

Keep this documentation!

The operating instructions are part of the product and shall be kept for the entire lifetime of the device. They shall be transferred to each subsequent owner or user of the device. Care must also be taken to ensure that any supplement to these instructions are included, if applicable.

1.1 Scope of Validity

This documentation applies to PERSPECTO-Panel 762-1035 (WP 35 QVGA).

1.2 Copyright

This Manual, including all figures and illustrations, is copyright-protected. Any further use of this Manual by third parties that violate pertinent copyright provisions is prohibited. Reproduction, translation, electronic and phototechnical filing/archiving (e.g., photocopying) as well as any amendments require the written consent of WAGO Kontakttechnik GmbH & Co. KG, Minden, Germany. Non-observance will involve the right to assert damage claims.



1.3 Symbols

▲ DANGER

Personal Injury!

Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

A DANGER

Personal Injury Caused by Electric Current!

Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

Personal Injury!

Indicates a moderate-risk, potentially hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

Personal Injury!

Indicates a low-risk, potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Damage to Property!

Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.



NOTICE

Damage to Property Caused by Electrostatic Discharge (ESD)! Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.



Note

Important Note!

Indicates a potential malfunction which, if not avoided, however, will not result in damage to property.





Information

Additional Information: Refers to additional information which is not an integral part of this documentation (e.g., the Internet).



1.4 Number Notation

Table 1: Number Notation

Number code	Example	Note
Decimal	100	Normal notation
Hexadecimal	0x64	C notation
Binary	'100'	In quotation marks, nibble separated with
-	'0110.0100'	dots (.)

1.5 Font Conventions

Table 2: Font Conventions

Font type	Indicates	
italic	Names of paths and data files are marked in italic-type.	
	e.g.: C:\Programme\WAGO-I/O-CHECK	
Menu	Menu items are marked in bold letters.	
	e.g.: Save	
>	A greater-than sign between two names means the selection of a	
	menu item from a menu.	
	e.g.: File > New	
Input	Designation of input or optional fields are marked in bold letters,	
	e.g.: Start of measurement range	
"Value"	Input or selective values are marked in inverted commas.	
	e.g.: Enter the value "4 mA" under Start of measurement range .	
[Button]	Pushbuttons in dialog boxes are marked with bold letters in square	
	brackets.	
	e.g.: [Input]	
[Key]	Keys are marked with bold letters in square brackets.	
-	e.g.: [F5]	



2 Important Notes

This section includes an overall summary of the most important safety requirements and notes that are mentioned in each individual section. To protect your health and prevent damage to devices as well, it is imperative to read and carefully follow the safety guidelines.

2.1 Legal Bases

2.1.1 Subject to Changes

WAGO Kontakttechnik GmbH & Co. KG reserves the right to provide for any alterations or modifications that serve to increase the efficiency of technical progress. WAGO Kontakttechnik GmbH & Co. KG owns all rights arising from the granting of patents or from the legal protection of utility patents. Third-party products are always mentioned without any reference to patent rights. Thus, the existence of such rights cannot be excluded.

2.1.2 Personnel Qualification

All sequences implemented on Series 762 devices may only be carried out by electrical specialists with sufficient knowledge in automation. The specialists must be familiar with the current norms and guidelines for the devices and automated environments.

All changes to the controller shall always be performed by qualified personnel with sufficient skills in PLC programming.



2.1.3 Use of the 762 Series in Compliance with Underlying Provisions

762 Series modules are suitable for use in the area of time control and automation. Their use extends beyond residential and commercial areas, as well as industrial areas. Technical data must be observed for all types of applications.



Note

Radio interference in residential areas

This is a class A device. This device can cause radio interference in residential areas. In this case, the operator may be required to take appropriate measures.

2.1.4 Technical Condition of Specified Devices

The components to be supplied Ex Works, are equipped with hardware and software configurations, which meet the individual application requirements. WAGO Kontakttechnik GmbH & Co. KG will be exempted from any liability in case of changes in hardware or software as well as to non-compliant usage of components.

Please send your request for modified and new hardware or software configurations directly to WAGO Kontakttechnik GmbH & Co. KG.



Note

Pixel error in TFT display Any pixel errors of the TFT display due to production reasons do not represent

grounds for complaint!



2.2 Safety Advice (Precautions)

For installing and operating purposes of the relevant device to your system the following safety precautions shall be observed:



Do not work on components while energized! All power sources to the device shall be switched off prior to performing any installation, repair or maintenance work.

A DANGER

Installation only in appropriate housings, cabinets or in electrical operation rooms!

The PERSPECTO Panel is an open system. As such, install the system exclusively in appropriate housings, cabinets or in electrical operation rooms. Allow access to such equipment and fixtures to authorized, qualified staff only by means of specific keys or tools.

NOTICE

Replace defective or damaged devices!

Replace defective or damaged device/module (e.g., in the event of deformed contacts), since the long-term functionality of device/module involved can no longer be ensured.

NOTICE

Protect the components against materials having seeping and insulating properties!

The components are not resistant to materials having seeping and insulating properties such as: aerosols, silicones and triglycerides (found in some hand creams). If you cannot exclude that such materials will appear in the component environment, then install the components in an enclosure being resistant to the above-mentioned materials. Clean tools and materials are imperative for handling devices/modules.

NOTICE

Cleaning only with permitted materials!

Clean soiled contacts using oil-free compressed air or with ethyl alcohol and leather cloths.



NOTICE

Do not use any contact spray!

Do not use any contact spray. The spray may impair contact area functionality in connection with contamination.



NOTICE

Avoid electrostatic discharge!

The devices are equipped with electronic components that you may destroy by electrostatic discharge when you touch. Pay attention while handling the devices to good grounding of the environment (persons, job and packing).



2.3 Characteristics of the CoDeSys Web visualization

Note

Depending on the version of CoDeSys installed

The functionality of the Web visualization depends on the version of CoDeSys "webvisu.jar" Java applet used.

This file is normally the same version as the CoDeSys version installed. The general function of the file is the responsibility of the company 3S. The version and function be explicitly checked. Always use the most current CoDeSys version from the WAGO-I/O-PRO-CD released by WAGO Kontakttechnik GmbH & Co. KG.

Please also observe the chapter "CoDeSys Web Visualization" in the CoDeSys online help.

The file "webvisu.htm" is the base HTML page for Web visualization and is copied when installing the WAGO-IO-PRO or WAGO-AUTOMATION-COCKPIT to the subdirectory <3S Software Installation Directory>\Visu. Settings can be made in this file to optimize and adjust Web visualization. Observe the CoDeSys online help, chapter "Editing the 'webvisu.htm' file" and chapter "Optimization of the Web Visualization" > "Adjustments in the WEBVISU.htm of the Controller".



Note

Limitations of the CoDeSys Web visualization

The CoDeSys Web visualization contains some limitations and particularities. In connection with the Web panel, the following description must be observed for continuous operation: To use this file with the WAGO Web panel, the call for the function "CookieHandling()" is disabled.

Depending on the visualization elements and Web server used, memory requirements may continously increase in the panel. Please regularly check the memory requirements of the panel. Observe the chapter "The WAGO Control Center" > "Advanced tab".



\rightarrow

Note

Response time depends on the number, type and form of the objects displayed

This device has been designed for presentation of simple CoDeSys Web visualizations. The device establishes communication with a controller (e.g. from the series 750-88x or 758-8xx) and displays the visualization pages stored there. Due to the limitations of the technologies used, the following points should be observed:

The response time depends on the number, type and form of the objects displayed. The fewer the objects displayed per page, the faster the device responds. More time is required the first time a visualization page is called up than subsequent calls.

There is a delay the first time a visualization page is displayed because it is first fully compiled in the working memory.

Should it take more than 1 second to compile, a message appears with the text "Loading ..." to indicate that background activity is underway. When switching to another visualization page, a copy of the page remains in the cache and subsequent calls of the page are much faster. Because the size of the cache is limited, it may not always be possible to store all pages in memory entirely depending on the application. As a result, you may experience delays later when calling up the same page.

2.3.1 Description of the Function "CookieHandling()"

The use of this Java Script function results in a continuous memory consumption on the Web panel.

The last set language for dynamic texts is stored by this mechanism and is automatically reset at the next call-up of the Web visualization.

This function is not possible on the Web panels. The response corresponds with that of an Internet browser that does not accept cookies.



3 Device Description

The 762 Series panels are used to operate and visualize the controllers of the WAGO-I/O-SYSTEM. The integrated WAGO-AUTOMATION COCKPIT development environment is used to program the panels and controllers.

3.1 PERSPECTO WP Web Panel

Featuring specialized software, the Web Panel functions as Web browser, connecting a controller with its own Web server.

With the Web Panels, more control units are easy to add.

The display of CoDeSys 2.3 Web visualization is optimized for the Web Panel.

The Web Panels are simple display and HMI devices and have no CoDeSys and HMI runtime of their own.



3.2 View

3.2.1 Front View



Figure 1: Front view

Table 3: Legend acc. to figure "Front view"

No.	Description
1	Front panel
2	Touch screen display



3.2.2 Back view



Figure 2: Back view

Table 4:	Legend	acc. to	o figure	"Back	view"
14010			119010	20011	

No.	Designation	Description
1	-	Housing
2	X6	Ethernet interface as RJ45 jack
3	X2	RS-485 serial interface (COM 2) as RJ45 jack (without function)
5	X5	CAN-Bus 0 (CANopen) interface as RJ45 jack (without function)
4	X8	USB host interface
5	Service	Service button
6	3V Battery CR2032	Battery case
7	X1	Connection for 24VDC power supply
8	X13	Slot for micro SD memory card



3.3 Connectors

3.3.1 X1 – Supply Voltage

Use the X1 connection for the device power supply. More information about the power supply and and power consumption is available in the "Technical Data" section.

	X1	
	Powe	r
24VDC	GND	Ξ
1	2	3
°	Ů	$^{\circ}$

Figure 3: Connector X1 – supply voltage

rable 5. m pm assignment

Pin	Assignment	Function
1	+24 V	Supply Voltage
2	0 V GND	Reference potential GND
3	FE	Ground conductor



3.3.2 X6 – Ethernet Interface

An RJ45 jack is used for the Ethernet interface.

The connections and cables must meet CAT.5 and the guidelines for Ethernet interfaces.

If there are more than 2 devices in a network, then they must be connected to each other by a HUB or SWITCH. A "1:1" cable is used here.

If there are only 2 devices in a network, a crossover cable can be used.



Figure 4: Connector X6 - Ethernet RJ45

Table 6: X6 pin assignment

Pin	Assignment	Function
1	TX+	Transmit Data +
2	TX-	Transmit Data -
3	RX+	Receive Data +
4	n.c.	-
5	n.c.	-
6	RX-	Receive Data -
7	n.c.	-
8	n.c.	-



3.3.3 X8 – USB Interface

The interface is designed as a USB host interface, type A.

The following table and illustration provide information on the pin assignment of the interface. The interface connection meets the USB specification 2.0.



Figure 5: Connector X8 – USB interface

Table 7: X8	pin	assignment
-------------	-----	------------

Pin	Assignment	Function
1	USB_VCC1	USB +5V DC
2	USB_N1	USB data line N1
3	USB_P1	USB data line P1
4	USB_GND	USB GND



3.4 Battery Case

A CAUTION

Do not charge, disassemble or burn the battery!

Incorrect use of the lithium battery contained in this device may cause damage incurred by fire or chemical burns. The battery must not be charged, disassembled, burned or exposed to temperatures exceeding $100^{\circ}C$ (212°F).

The battery case holds a 3 V lithium battery, type CR2032, that supplies the real time clock and the SRAM with power in case of a power failure.

If you want to change the lithium battery during a power failure, make sure that you have the new battery ready to hand. For a certain time a gold cap capacitor provides the required power. The data of the volatile memory (SRAM) is therefore preserved during a battery exchange.

At room temperature, the battery has a life span of about one year.



Figure 6: Battery case



3.5 Slot for Memory Card

The panel 762-1035 is equipped with a Flash memory slot on the side for a micro SD card. It supports cards with a 2 GB maximum. Supported memory cards (item no. 758-879/000-002) are available from WAGO.



3.6 **Operating Elements**

3.6.1 Service Button

The service switch on the back of the device is used to call up the Windows CD desktop. The WAGO Control Center can be launched, for example, to configure the device.



Figure 7: Service button



3.7 Technical Data

3.7.1 Housing

Table 8: Technical data housing

Front panel	Plastic, polyester film
Housing material	Plastic
Dimensions (W x H x L)	96 mm x 96 mm x 29 mm
Panel cutout (B x H)	91 mm x 91 mm
Fixing means	2 clamping elements
Operating temperature	0 °C +55 °C
Storage temperature	-10 °C +60 °C
Relative humidity (without	10 % 85 %
condensation)	
Weight	170 g
Degree of protection	Front IP65,
	back IP20

3.7.2 Power Supply

Table 9: Technical data power supply

Voltage supply	DC 24 V (18 V 30 V)
Max. input current (24 V)	500 mA
Operating power	8 W 12 W
Buffer battery	CR2032

3.7.3 Display

Table 10: Technical data display

1 7	
Display type	TFT
Screen size (diagonal)	8.9 cm (3.5 ")
Display colors	262,000 colors
Graphics resolution	320 x 240 pixels
Contrast ratio	800:1
Angle of view horizontal / vertical	-60 $^{\circ}$ +60 $^{\circ}$ / -60 $^{\circ}$ +45 $^{\circ}$
Brightness	560 cd/m ²
HBT*	50,000 hrs.
Panel	Touch, analog, resistive
Light transmission typ.	80 %
Durability	100,000 activations with touch pen
* HBT (Half Brightness Time) define	s the LED chip brightness decrease to

HBT (Half Brightness Time) defines the LED chip brightness decrease to 50% original brightness at Ta = $25 \pm 2^{\circ}$ C and RH = $60 \pm 10^{\circ}$.



3.7.4 Hardware

Table 11: Technical data hardware

Processor	32 Bit ARM9 200 MHz
RAM / Flash / SRAM	64 Mbyte / 64 Mbyte / 1 Mbyte
Memory expansion	MicroSD card (max. 2 GB)

3.7.5 Software

Table 12: Technical data software

Operating system	Windows CE 6.0
Software configuration	Internet browser
	Java Virtual Machine
	panel configuration software

3.7.6 Interfaces

Table 13: Technical data interfaces

USB interface	1 x USB2.0 Host (Type A)
Ethernet interface	1 x 10/100 Mbit RJ-45
Maximum length of connecting cables	USB: maximum 3 m
	Power supply: maximum 3 m to power
	supply



3.8 Approvals

The following approvals have been granted to 762-1035 PERSPECTO panels:



The following ship approvals have been granted to 762-1035 panels:



GL (Germanischer Lloyd)

Cat. A, B, C, D (EMC 1)

3.9 Standards and Guidelines

762-1035 PERSPECTO panels meet the following requirements on emission and immunity of interference:

EMC CE-Immunity to interference	acc. to EN 61000-6-2: 2005
EMC CE-Emission of interference	acc. to EN 61000-6-4: 2007
EMC marine applications-Immunity to interference	acc. to Germanischer Lloyd (2003)
EMC marine applications-Emission of interference	acc. to Germanischer Lloyd (2003)

4 Mounting

4.1 Front Panel Installation

The devices are intended for installation in switch cabinets, for example. Vertical installation of the panels is recommended.



Note

Note about differing mounting position!

The operating temperature ranges specified in the technical data apply to the recommended mounting position. If the panel is mounted in a position different than recommended, cooling can be affected. Contact WAGO Service for more information.

The PERSPECTO Series panels are used in the panel cutout provided and bolted down with the included clamping elements and the intermediate plate from behind (note the following installation diagram).



Note

Do no forget the intermediate plate!

Insert the included intermediate plate between the clamping screws and the panel cutout. Make sure that the clamping screws engage in the holes of the intermediate plate!



Figure 8: Installation of the clamping elements





Figure 9: Detailed photograph of installation with intermediate plate

Information on the dimensions of the panel cutout is available in the Technical Data section.



5 Connect Devices

The interfaces to the back of the device are used to connect the devices electrically. The number and arrangement of the interfaces depend on the design (note the information in the "Technical Data" chapter or "Connection" chapter).

The Ethernet interface is used for connection to a LAN.

The USB master interfaces are used for connecting to a keyboard, mouse or USB stick. Because there are a large number of USB devices on the market, no guarantee can be made about the function of individual devices.



6 Commissioning

6.1 Switch on

After applying the power supply, the device switches on automatically.

After the boot and self-test phase that lasts about 10 seconds, the programs set in the WAGO Control Center (e.g. HMI runtime) are launched automatically.

To stop the programs and Windows CE desktop for configuring the panels from launching automatically, the touch screen must be touched within a adjustable time period (default setting 3 s) after the boot & self-test phase.

The service switch on the back of the device can be used to launch the Windows CE desktop at any time.

The WAGO Control Center can be used to change the start behavior of the device.



Note

Time window for launching the Windows CE desktop!

The WAGO Control Center can be used to set the time window for launching the Windows CE desktop after the boot and self-test phase. If the time is set to 0, the Windows CE desktop can only be launched by the

service switch.



6.2 IP address of the device

6.2.1 General

The Web panels communicate with the Web server via the TCP/IP protocol. Therefore, a TCP/IP connection is required. An IP address must be assigned to the device after switching it on for the first time.

The WAGO Control Center installed on the device is used to assign the IP address by default (observe "Setting the IP Address" section).

The device can either draw its IP address from a DHCP server on the network or the device can be assigned a fixed IP address.

The current IP address can be queried by double-clicking on the network icon in the system tray in the task bar.



Note

DHCP / fixed IP address

The device must be connected to a network to change the IP address from DHCP to a fixed IP address.

6.2.2 Setting the IP Address

The WAGO Control Center is used to set the IP address. Call up the WAGO Control Center from the Start menu:

Start > Programs > Utilities > WAGO Control Center

- 1. Click the **Advanced** tab and then on the **[LAN]** button.
- 2. In the "Adapter Settings", click on the **IP Address** tab.
- 3. Enter the desired IP address and click **[OK]** to confirm.



TP Address Name Servers	States States
computer. If your network	
does not automatically assign IP Address: 192.168.2 .1	
administrator for an address, Subnet Mask: 255.255.255.0	
provided. Default Gateway:	

Figure 10: IP address

6.2.3 IP Address

When using a crossover cable to connect between the panel and configuring PC directly, it is recommended that both devices have fixed IP addresses with an open address in the range 192.168.1.xxx.

In this case, the subnet mask is automatically set to 255.255.255.0. There is no default gateway.



Note

IP Address

The devices must be set to different IP addresses.



6.3 The WAGO Control Center

The WAGO Control Center can be used to configure the device. Settings for the Autostart programs, uses, FTP/HTTP and RAS access can be made. General device settings can also be checked and modified.

6.3.1 Starting the WAGO Control Center

The WAGO Control Center is launched from the Start menu:

Start > Programs > Utilities > WAGO Control Center

The tabs of the WAGO Control Center are explained on the following pages.



6.3.2 "General" Tab

WAGO Control Ce	enter	ок 🗙
General Autostart	Applications Users F	TP HTTP RAS Backup / Restore Advanced
_[Device Informa	tion ———	
Device Name:	WindowsCE	IP Address:
Versions:		<u> </u>
		y
General ——		
Watchdog	0 ms	Don't start Windows CE shell
Simple Network	k Time Protocol ——	
SNTP Server:	tock.usno.navy.mil	Client-Only
Refresh rate:	1 hr. 📑	
L		

Figure 11: "General" tab

Device Information

Information about the device is found here. This information is important, for example, for support cases.

General

Watchdog:

A watchdog can be configured here, which can restart the device if it crashes after a set time.

Don't start Windows CE Shell:

If the checkbox is enabled, the Windows CE desktop can no longer be launched. The task bar is no longer displayed.

Simple Network Time protocol:

If there is an Internet connection, the system clock of the device can be synchronized via an SNTP server.

Client Only

If the checkbox is enabled, the internal SNTP server is disabled.



6.3.3 "Autostart Applications" Tab

You can enter programs here that should launch automatically after booting. The HMI runtime is entered here by default.

The time window for launching the programs after the boot and self-test phase of the device can also be set here.



Figure 12: "Autostart Applications" tab

Enter the program to be called in the "Application:" line and the parameters to be passed in the "Arguments" line.

Example:

Application:	Flashdisk\CrEme\bin\CrEme.exe
Arguments:	-cf Flashdisk\creme.cfg 'http://192.168.1.1/plc/webvisu.htm'



6.3.4 "Users" Tab

You can create FTP users, grant rights and assign directories. The menu is generally self-explanatory.

GO Control Cent	er		OH
eneral Autostart Ap	plications Users FTP HT	TP RAS Backup / Rest	ore Advanced
User HTTP virtual root	FTP Home Directory HTTP directory path	Rights	
			1.0
		Pomovo III	Now usor

Figure 13: "Users" tab

User/Virtual Roots:

A directory from another (protected) tree, for example, can be put in the user's home directory. By doing so, you gain access to this and subsequent directories.

FTP Home Directory/HTTP directory path:

The user starts downwards from this menu. The use cannot get to higher-level directories

Rights:

Access rights assigned to users are displayed here.



Note

Access Rights

If no home directory is set for a user, the user gets FULL ACCESS to the panel despite disabled write access. Enter at least on $\$ in the home directory.



6.3.5 "FTP" Tab

You can configure the FTP server of the device here.

More information about creating users is available in the "Users Tab" section.

eneral Autostart Application	SUSERS FTP HTTP RAS	S Backup / Restore Advanced
Enable server		
Allow anonymous Use Authentication	Allow low port values Allow anonymous upload	Allow anonymous Vroots
Users:		
Default directory: 🛝		
Virtual roots:		71 V

Figure 14: "FTP" tab



6.3.6 "HTTP" Tab

VAGO Control Cer	nter			ок 🗙
General Autostart /	Applications Users FTP	HTTP RA	S Backup / Resto	re Advanced
Enable server Logging directory: MaxLogSize:	\windows\www 32768	Bytes		
Admin Users:				
Virtual paths:		_		n×
17	\Elashdisk\www.mu.h\	ALL	(JII)	
/Admin /SysAdmin /upnp /upnpisapi	\windows\httpdadm.dll \windows\sysisapi.dll \windows\uppp\ \windows\uppp\	ALL USER ALL ALL	(all) admin (all)	

You can configure the Web server of the device here.

Figure 15: "HTTP" tab

Application example:

An \httptest directory with the /test alias was created on the flash disk.

A Web page index.htm was created in this directory.

The page can be used in a Web browser to access the following address:

http://[IP address of the device]/test



6.3.7 "RAS" Tab

The Remote Access Service (RAS) is a service for remote access to a Windows CE device.

WAGO Control Center	OK ×
General Autostart Applications Users FTP	HTTP RAS Backup / Restore Advanced
Enable server IP header compr. Users:	Data compr.
	PAP CHAP MS-CHAP MS-CHAP v2
IP Addresses Get Addresses from: AutoIP Pool Static IP Addr Start: IP2 . 168	254 . 1 Count: 254
Lines:	

Figure 16: "RAS" tab

Both RAS functions, server and client, are supported.

The connection between a RAS client and the RAS server can be established via a modem, VPM or direct connection.

For more information about the Remote Access Service (RAS) of the device, please contact WAGO Support.



6.3.8 "Backup/Restore" Tab

You can save and restore the device configuration and project data, for example, on a memory card.



Figure 17 "Backup/Restore" tab

The **[Backup]** button is used to save the parameters defined in the *backup_restore.cfg* and entries on the target data carrier.

The **[Restore]** button is used to restore the parameters defined in the *backup_restore.cfg* and entries on the device.



Note

Create backup!

It is recommended that you create a backup after commissioning the device and to keep the backup in a safe place.



Note

Operating system update!

There is no operating system update for the device.



6.3.9 "Advanced" Tab

You can perform advanced settings for the device. The menu is generally self-explanatory.

AGO Control Cente			ок
General Autostart App	lications Users	FTP HTTP R.	AS Backup / Restore Advanced
Date/Time	LAN	System	Volume & Sounds
Brightness:			192
Touchbeeper: (PLC_CE_rt			o
Internet Explorer - Scrollbar Size	Default Default	Options	Communication CAN bus termination Com-Port O RS 422 ● RS 485 °

Figure 18: "Advanced" tab

6.3.9.1 Read memory consumption

Click the [System ...] button and select the [Memory] tab.

			1	
Date/Time	LAN	System	Volume & Sour	ds
System Proper	ties		•	ок 🗙
General Memo	ry Device Nan	ne Copyrights		1.2 50.13
Move slider to	o the left for m	nore memory to rui	n programs. Move s	ider to
n thenghillion	more storage i	oom. Only unused	RAM Carl De aujust	eu.
Storage t Memory				Program Memory
Storage Memory C			Allocatod	Program Memory

Figure 19: Memory consumption

A progress bar displays the memory consumption.



6.3.10 Saving the Configuration

After configuring the panel, the settings must be permanently saved in the registry. Call up the following utility program:

Start -> Programs -> Utilities -> Save Registry



Note

Fail-safe saving of the configuration!

If the settings are not saved as described, they are lost when the device is restarted.



6.4 Optimizing Web Visualization

The following settings have been made to optimize visualization.

6.4.1 Starting the Java Virtual Machine as an Applet Viewer

The following call is enabled by default in the Autostart Applications tab.

Application:Flashdisk\CrEme\bin\CrEme.exeArguments:-cf Flashdisk\creme.cfg 'http://192.168.1.1/plc/webvisu.htm'

Change the IP address based on your application.

To connect an IPC to the Web panel, please use the following syntax for the URL: "http://192.168.1.1:8080/webvisu.htm".

To keep the call line short and simple, most settings are saved to a configuration file.

The name of the configuration file with path is passed to the application by the -cf parameter.



Note

Recommended start version

This start version is recommended in connection with CoDeSys.

Example: Content of the configuration file "Flashdisk\creme.cfg" (with comments not included in the file)

-x320	Width of the display in pixels
-y240	Height of the display in pixels
-ntb	Disables the window header line, full screen mode
-ml 20000	Set memory limit to 20000 KB
-aa 1	Anti Aliasing Level (from 0 (no anti-aliasing)) to 5 (best quality))
-av	Start Java Virtual Machine (JVM) as an applet viewer

6.4.2 Starting Internet Explorer in Full-Screen Mode

Internet Explorer can also be started in full-screen mode. The "iesimple.exe" file is launched.

Make the following settings:

Enter the following command in the **Autostart Applications** tab for starting Internet Explorer:

Application:\FlashDisk\SysExtras\Tools\iesimple.exeArguments:IP address of the page to be displayed



6.4.3 Adjustments in the WEBVISU.htm of the Controller

In CoDeSys version 2.3.9.28, changes have been made to the "webvisu.jar" java applet for the Web visualization.

To optimize performance of the PERSPECTO panel, the following two parameters have been adjusted in the "WebVisu.htm" and "WebVisu_wago.htm" files:

<param name="UPDATETIME" value="100">
<param name="USEURLCONNECTION" value="False">

After installation of the WAGO-CoDeSys application, the htm files and jar file are located in the CoDeSys installation directory.

Example path: C:\Program Files\WAGO Software\CoDeSys V2.3\visu



7 Service

7.1 Battery Maintenance

A CAUTION

Do not charge, disassemble or burn the battery!

Incorrect use of the lithium battery contained in this device may cause damage incurred by fire or chemical burns. The battery must not be charged, disassembled, burned or exposed to temperatures exceeding 100°C (212°F).

Replace the battery only with an identical one!

Only replace the lithium battery with an identical one. Use of another type of lithium battery may present a risk of fire or explosion.

NOTICE

Data loss!

If the device is switched off when the battery has failed or has reached its capacity without replacing the battery, any settings not saved are lost.

The battery in the device control buffers the adjustable parameters and the time for a power failure or switched off device.

Replace the battery as follows:

- 1. Make sure that the device has been on for at least 10 minutes before replacing the battery, allowing the buffer capacitors to load.
- 2. Switch off the power supply.
- 3. Remove the buffer battery and install a new one.
- 4. Restore the power supply.
- 5. Dispose the discharged battery immediately in a proper manner.



List of Figures

Figure 1: Front view	16
Figure 2: Back view	17
Figure 3: Connector X1 – supply voltage	18
Figure 4: Connector X6 - Ethernet RJ45	19
Figure 5: Connector X8 – USB interface	20
Figure 6: Battery case	21
Figure 7: Service button	23
Figure 8: Installation of the clamping elements	27
Figure 9: Detailed photograph of installation with intermediate plate	28
Figure 10: IP address	32
Figure 11: "General" tab	34
Figure 12: "Autostart Applications" tab	35
Figure 13: "Users" tab	36
Figure 14: "FTP" tab	37
Figure 15: "HTTP" tab	38
Figure 16: "RAS" tab	39
Figure 17 "Backup/Restore" tab	40
Figure 18: "Advanced" tab	41
Figure 19: Memory consumption	41



List of Tables

Table 1: Number Notation	
Table 2: Font Conventions	
Table 3: Legend acc. to figure "Front view"	16
Table 4: Legend acc. to figure "Back view"	
Table 5: X1 pin assignment	
Table 6: X6 pin assignment	
Table 7: X8 pin assignment	
Table 8: Technical data housing	
Table 9: Technical data power supply	
Table 10: Technical data display	
Table 11: Technical data hardware	
Table 12: Technical data software	
Table 13: Technical data interfaces	



 WAGO Kontakttechnik GmbH & Co. KG

 Postfach 2880
 • D-32385 Minden

 Hansastraße 27
 • D-32423 Minden

 Phone:
 +49/5 71/8 87 – 0

 Fax:
 +49/5 71/8 87 – 1 69

 E-Mail:
 info@wago.com

Internet:

http://www.wago.com

