



Synco™ living

Web server

OZW772.01

The OZW772.01 web server is used in plants featuring Synco™ living by Siemens.
Key features:

- Remote operation and monitoring of a QAX910 central apartment unit.
- Web browser operation via PC/laptop or Smartphone.
- Local connection via USB or Ethernet connection.
- Remote connection via Ethernet (DSL router).
- Simultaneous support of multiple users.
- Send fault messages to email and SMS recipients.
- Periodic sending of system reports.
- 4 configurable message recipients.
- Customizable user profiles for web operation.
- Software update via direct connection (USB).

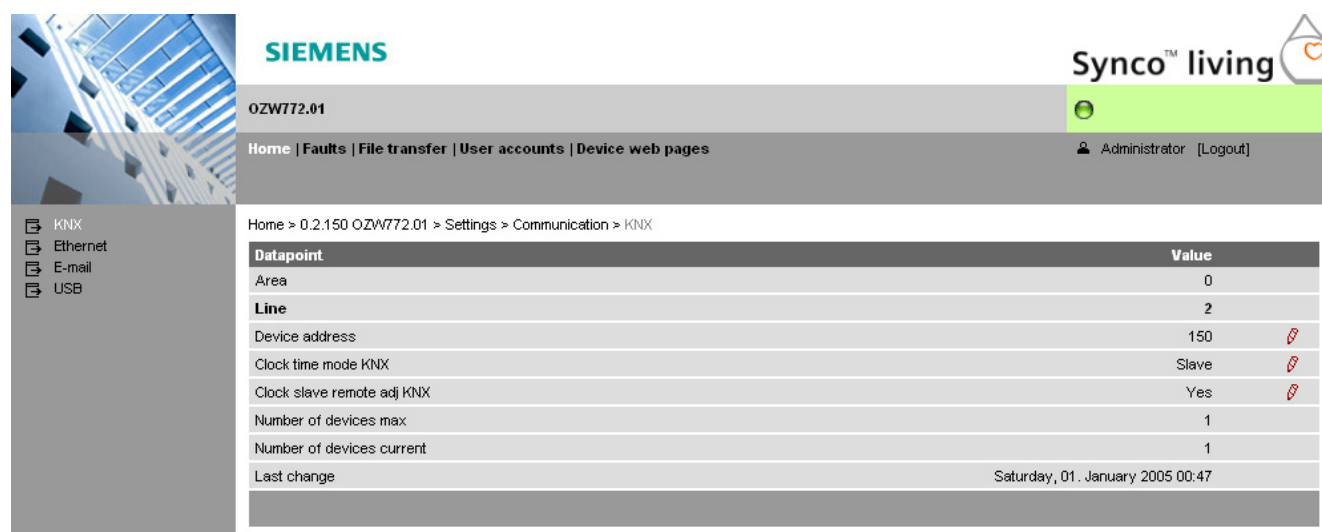
Use

Building	<ul style="list-style-type: none">• Synco™ living central apartment units in single and multi-family homes
Owners/operators	<ul style="list-style-type: none">• End customers• HVAC and electrical engineers• Real estate agencies, real estate management companies

Functions


Primary functions	The OZW772.01 primarily serves to: <ul style="list-style-type: none">• Remotely operate and monitor Synco™ living systems via web browser• Send faults and system reports to max 4 different email and SMS recipients
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Operation




Datapoint	Value
Area	0
Line	2
Device address	150
Clock time mode KNX	Slave
Clock slave remote adj KNX	Yes
Number of devices max	1
Number of devices current	1
Last change	Saturday, 01. January 2005 00:47

Primary navigation	Primary navigation offers the following functions: <table><tr><td>Home</td><td>Device operation via menu tree.</td></tr><tr><td>Faults</td><td>System fault display.</td></tr><tr><td>File transfer</td><td>Show history featuring the last 500 events.</td></tr><tr><td>User accounts</td><td>User administration.</td></tr><tr><td>Device web pages</td><td>Create device list and operating pages.</td></tr></table>	Home	Device operation via menu tree.	Faults	System fault display.	File transfer	Show history featuring the last 500 events.	User accounts	User administration.	Device web pages	Create device list and operating pages.
Home	Device operation via menu tree.										
Faults	System fault display.										
File transfer	Show history featuring the last 500 events.										
User accounts	User administration.										
Device web pages	Create device list and operating pages.										
Secondary navigation	Secondary navigation (menu tree) allows users to select devices and operating pages.										
Display	The display shows the contents as selected in primary navigation.										
Plant state	Depending on the plant state, the display indicates no fault or the most serious plant fault.										
Faults											
Fault sources	The web server is able to identify faults and failures of Synco™ living as well as own faults.										
Fault indication	The web server indicates central apartment unit and web server faults via LED 🔔.										
Fault status message	Faults can be sent via email and forwarded to SMS recipients via the service provider. You can configure four different message recipients. You can set both receiver type and fault priority individually for each recipient. Each recipient has a "Time switch with calendar" to program three sending times per day as well as holidays/special days.										

Fault acknowledgement LED  blinks to indicate that a fault is unacknowledged. The LED continues to be lit for as long as the fault is pending after the fault is acknowledged with the "Ack" button or via web operation.

System report

System messages The web server generates system reports and periodically sends the system operating state to different recipients. Messages are sent as per the set time (hh:mm), message cycle interval (1...255 days), and priority (urgent/non-urgent) to message recipients.

Connection test The web server sends a system report to all message recipients regardless of its own fault priority when triggered via remote button .

History

The history includes the last 500 events on faults, fault messages, and system reports. The events are entered in the web server's circular message buffer. The history data can be read via web browser.

Time

The web server has a system clock with adjustable time zone and daylight saving/standard time changeover. As clock time master, it can send the set system time (date and time) to the central apartment unit.

Equipment combinations

Web browser

PC/laptop (1024x786)	Internet Explorer V6.0 or higher Firefox V3.0 or higher
Smartphone (320x240)	Opera for Symbian OS V8.65 or higher
iPhone (480x320)	Safari (as per the respective end device)

Number of browsers

Any number of browsers can be used simultaneously. Max data traffic on the line is divided up among the browsers. As a result, operation slows down depending on the number of simultaneous users.

Ordering and delivery

When ordering, provide both name and **product number (ASN)**:

Product no.	Name
OZW772.01	Web server

- The web server is delivered in a cardboard box.
- The installation instructions G5701 are inserted in the package.
- The commissioning instructions C5701 (de/en) are available on the web server at <http://<IP address>/doc/>.
- Power cable
- Ethernet cable
- USB cable
- 2 cable straps

Web server OZW772.01

Document type	Document no.
Installation instructions	G5701
Data sheet	N5701
Commissioning instructions	C5701

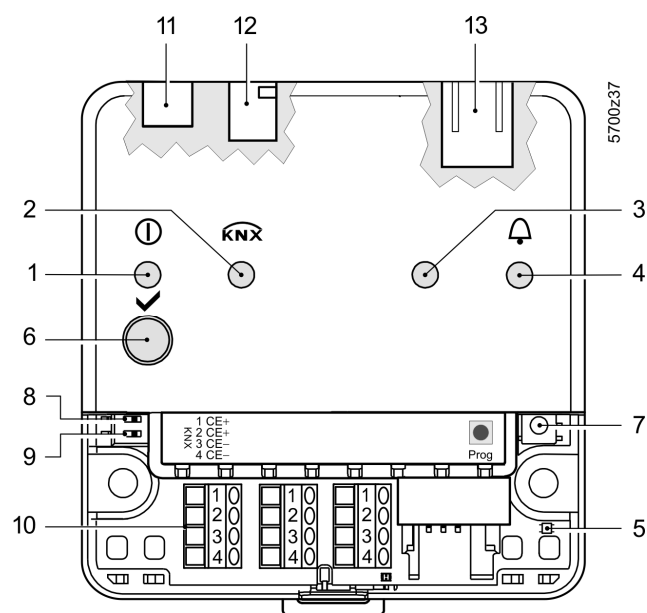
Synco™ living

Product	Data sheet no.
Central apartment unit QAX910	N2707
Operating instructions QAX910	B2707
Mounting and commissioning instructions QAX910	C2707

Design

Basic design

The web server consists of the housing lower section with printed circuit boards and interfaces as well as connection terminals. The upper housing section contains the printed circuit boards. The upper housing section contains the LED displays and one operating button. These elements and the connection terminals are labeled on the housing front. The terminal area can be accessed via removable cover. This area contains the connection terminals, one additional button and LED as well as a double DIP switch.

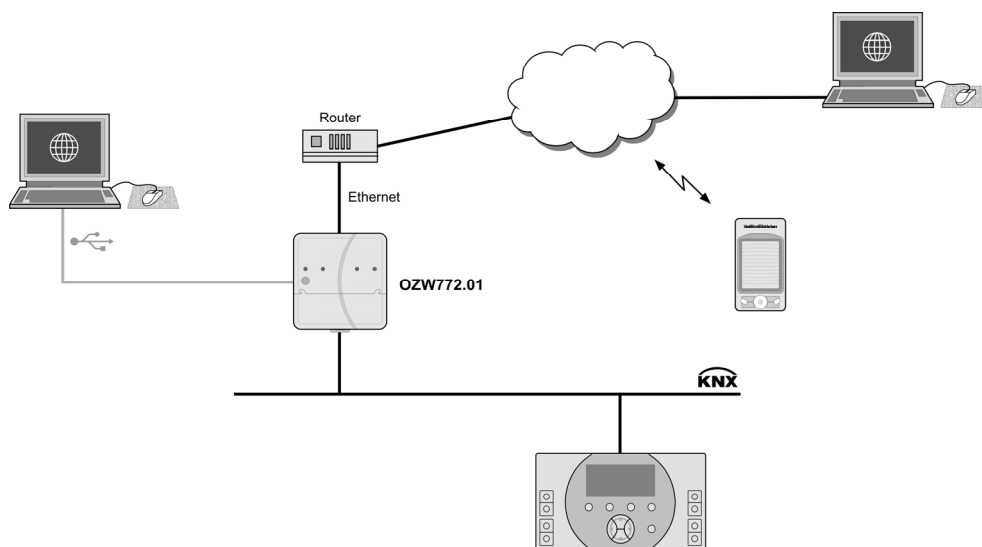


Pos	Designation	Element
1	On LED ①	LED (green / red)
2	KNX LED	LED (green)
3	Field bus LED 2	LED (no function)
4	Fault LED	LED (red)
5	Addressing mode LED	LED (red)
6	Remote button	Button
7	Addressing mode button Prog	Button
8	DIP switch message suppression	Switch
9	DIP switch 2	Switch (no function)
10	Terminals CE+, CE–	KNX connection terminals
11	External voltage plug	DC connection
12	USB plug	USB connection Mini-B
13	Ethernet plug	RJ45 network connection

Technical features

Operation, monitoring, alarming

Communication connections for local commissioning (USB) and remote operation, remote monitoring and alarming via Ethernet.



57100-235a

Interfaces

The web server has two interfaces for communication between web server and user as well as a KNX connection.

USB

The USB interface directly connects the PC/laptop on site.
The required USB cable type A – type Mini-B is delivered with the device.

Ethernet

The router/network is connected to the Ethernet RJ45 plug. The Ethernet interface features Auto-MDI(X) for crossed and non-crossed Ethernet cables. A Ethernet cable category 5 is delivered.

KNX

The central apartment unit is connected to the CE+ and CE- connection terminals labeled "KNX". See data sheet N3127 for more information on the KNX bus.

Protocols

Web operation

Use HTTP (Port 80) via TCP/IP for web operation. A RNDIS driver on the PC is required for USB communication. The RNDIS driver is installed automatically when the PC is connected to the Internet. The driver is stored on the web server under <http://<IP address>/driver/>.

Fault messages

Fault messages are sent as emails via SMTP.

Mounting notes

You can mount the web server in a panel, a distribution box, or on flat wall. Plan sufficient space around the unit for easy wiring. Make sure service can easily access the unit and the unit is ventilated properly.

Standard mounting	On standard rail TH 35-7.5
Screwed-on mounting	Screwed to wall
Mounting position	Horizontal or vertical
Mounting and dimensions	See "Dimensions"

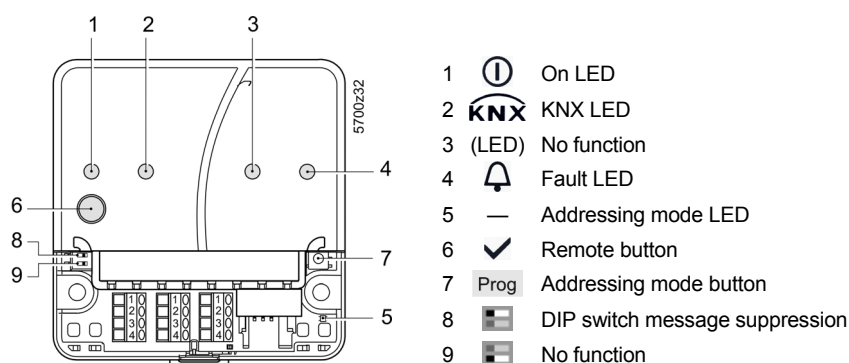
Installation notes

Important notes	<p>Observe the following when installing:</p> <ul style="list-style-type: none">• Run fuses, switches and wiring as per local regulations for electrical installations.• We do not recommend plant monitoring via USB interface in environments with strong electromagnetic interference (e.g. in industrial environments with electrical welding equipment).• If too close, the device may impact other electronic equipment.
Operating voltage	Connect the web server to the delivered power plug DC 24 V satisfying SELV requirements (safety extra-low voltage).
Wiring	The KNX bus terminals are located at the bottom of the device. The operating voltage plug DC 24 V as well as the plugs for USB and Ethernet interfaces are located on the top of the device.
Connection terminals	The terminals are designed for wire diameters of min. 0.5 mm or cross-sections of 0.25...1.5 mm ² or stranded wire cross-sections of 0.25...1.0 mm ² . See "Technical data".

Commissioning notes

Connections

Commissioning	<p>Commission the web server locally via USB interface using the PC or laptop. The PC/laptop must contain a suitable web browser (see "Technical data").</p> <p>You need a USB cable type A – type Mini to locally connect the USB interface of the web server to the PC laptop.</p> <p>For more information, see the installation instructions G5701 (added to device) or the commissioning instructions C5701.</p>						
Router	You need a suitable router for remote operation via Internet. The router must support NAT/PAT and DynDNS depending on the application.						
IP address	<p>The IP address via USB is set: 192.168.250.1.</p> <p>Default setting for IP address via Ethernet: 192.168.251.1.</p> <p>The network system administrator must provide an IP address for the web server before you can connect the web server via Ethernet to a managed network.</p>						
User groups	<p>User accounts are created and assigned to specific user groups for customized user operation .</p> <table><tr><td>End user</td><td>Works with end user data, fault overview, and manage own user account.</td></tr><tr><td>Service</td><td>Works with data at Service and End User levels, fault overview, message history, manage own user account.</td></tr><tr><td>Administrator</td><td>Works with data at Service and End User levels, fault overview, message history, create device web pages, and manage all user accounts.</td></tr></table>	End user	Works with end user data, fault overview, and manage own user account.	Service	Works with data at Service and End User levels, fault overview, message history, manage own user account.	Administrator	Works with data at Service and End User levels, fault overview, message history, create device web pages, and manage all user accounts.
End user	Works with end user data, fault overview, and manage own user account.						
Service	Works with data at Service and End User levels, fault overview, message history, manage own user account.						
Administrator	Works with data at Service and End User levels, fault overview, message history, create device web pages, and manage all user accounts.						



Displays

- | | | |
|-------------------------|--|--|
| 1 (green/red) | <ul style="list-style-type: none"> • Dark • Steady red • Flashing red • Steady green | <p>No power</p> <p>Web server starts operating system</p> <p>Web server starts application</p> <p>Web server operational</p> |
| 2 (green) | <ul style="list-style-type: none"> • Dark • Lit • Flashing | <p>No bus power</p> <p>KNX operational</p> <p>Communication on KNX</p> |
| 3 Field bus-LED 2 | | No function |
| 4 (red) | <ul style="list-style-type: none"> • Dark • Lit • Flashing | <p>No fault (normal operating state)</p> <p>Acknowledged fault</p> <p>Unacknowledged fault exists</p> |
| 5 Addressing mode (red) | <ul style="list-style-type: none"> • Dark • Lit | <p>KNX addressing mode off</p> <p>KNX addressing mode on</p> |

Operating buttons

- | | | |
|--------------------|---|--|
| 6 Remote | <ul style="list-style-type: none"> • Short (< 2 s) • Long (> 6 s) | <p>Acknowledges fault message</p> <p>Sends system report to configured recipients</p> |
| 7 Addressing mode | <ul style="list-style-type: none"> • Short (< 2 s) | <p>Single pressure: KNX addressing mode on</p> <p>Press again: KNX addressing mode off</p> |



Button combinations

- | | | |
|-----|---|--|
| and | <ul style="list-style-type: none"> • Long (> 6 s) | <p>Simultaneous pressure on "Remote" and "Prog" restores default factory values.</p> <p> All configuration data and settings are reset. The device list and all unsent messages are deleted. History data is <i>not</i> deleted.</p> |
|-----|---|--|

Switch

- | | | |
|------------------------|---|--|
| 8 Message suppression | <ul style="list-style-type: none"> • Position "On" • Position "Off" | <p>Message sending suppressed</p> <p>Message sending allowed</p> |
| 9 DIP switch 2 | | No function |

Technical data

Power supply	Power cable	
	Operating voltage	AC 230 V \pm 15 %
	Rated voltage	AC 230 V
	Frequency	50/60 Hz
	Protection class	II
	Output voltage	SELV DC 24 V
	Supply line fusing	16 A max.
	Power consumption OZW772.01	2 W typical
Function data	Operating voltage OZW772.01	SELV DC 24 V, \pm 5 %, 625 mA max.
	Device list	1 central apartment unit QAX910
Connecting terminals	Screw terminals for	
	Solid/stranded wire (twisted or with ferrule)	min. \varnothing 0.5 mm
	1 solid wire per terminal	0.25...1.5 mm ²
Inputs and outputs	1 stranded wire per terminal	0.25...1.0 mm ²
PC interface	Interface	
	Standard	USB V2.0
	Device class	RNDIS
	Baud rate	max. 12 Mbps (full speed)
	Connecting cable for operator station	
	Cable length	Max. 3 m
KNX bus	Cable type for connection to PC/laptop	USB type A
	Cable type for connection to OZW772.01	USB type Mini-B
Ethernet	Interface type	TP1 (twisted pair, 1 cable pair)
	2-wire bus	CE+, CE- (non exchangeable)
	Bus load number	E 0.3
	KNX bus power consumption	5 mA
Ambient conditions	Permissible line length and cable types	See data sheet N3127
Ethernet	Interface type	100BaseTX, IEEE 802.3 compatible
	Bit rate	Max. 100 Mbps
	Protocol	TCP/IP
	Identification	Auto MDI-X
	Connection	RJ45 plug (screened)
	Cable type	Standard Cat-5, UTP or STP
Ambient conditions	Cable length	Max. 100 m
Ambient conditions	Operation	IEC 60721-3-3
	Climatic conditions	Class 3K5
	Temperature (housing and electronics)	0...50 °C
	Humidity	5...95 % r. h. (non-condensing)
	Mechanical conditions	Class 3M2
Ambient conditions	Transport	IEC 60721-3-2
	Climatic conditions	Class 2K3
	Temperature	-25...+70 °C
	Humidity	<95 % r. h.
	Mechanical conditions	Class 2M2
Degree of protection	Degree of protection for OZW772.01	IP 30 as per EN 60529
	Degree of protection for OZW772.01	III to EN 60950-1
Standards		
	Product safety for	
	Information technology equipment – Safety	EN 60950-1
	Home and Building Electronic System (HBES)	EN 50090-2-2
	Electromagnetic compatibility	
	Immunity (Industrial environments)	EN 61000-6-2
	Emissions (Industrial environments)	EN 61000-6-4
	Home and Building Electronic System (HBES)	EN 50090-2-2
	 conformity	
	EMC directive	2004/108/EC
	Low voltage directive	2006/95/EC
Standards	 conformity	
	Australian EMC Framework	AS/NZS 61000-6-4
	Radio Interference Emission Standard	

Environmental compatibility	ISO 14001 (Environment)
The environmental product declaration CE1E5701en contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal)	ISO 9001 (Quality)
	SN 36350 (Environmentally compatible products)
	2002/95/EC (RoHS)


Materials and colors	Upper housing section	PC + ASA, RAL 7035 (light-gray)
	Lower housing section	PC + ASA, RAL 5014 (dove blue)

Dimensions	Length x width x height (max. dimensions)	87.5 mm x 90 mm x 40 mm
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Weight	Basic unit	0.136 kg
	Full unit	0.589 kg
	Basic unit with packaging, installation instructions, power unit, USB and Ethernet cable, cable straps.	
	Packaging	Cardboard box

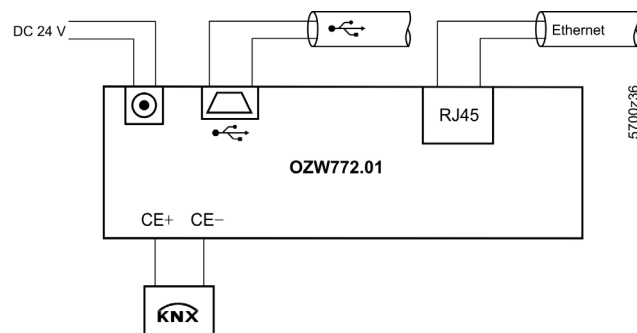
Terms, abbreviations	Auto Medium Dependent Interface - Crossed	Auto MDI-X
	Dynamic Domain Name System	DynDNS
	Hyper Text Transfer Protocol	HTTP
	Internet Protocol	IP
	Konnex	KNX
	Network Address Translation	NAT
	Port and Address Translation	PAT
	Remote Network Driver Interface Specification	RNDIS
	Shielded Twisted Pair	STP
	Simple Mail Transfer Protocol	SMTP
	Transmission Control Protocol	TCP
	Universal Serial Bus	USB
	Unshielded Twisted Pair	UTP

General notes

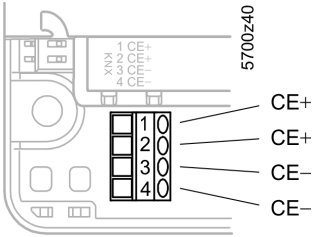
Maintenance	The OZW772.01 web server is maintenance free (no battery changes, no fuses). Use only a dry towel to clean the housing.
Repair	The OZW772.01 cannot be repaired on site. If faulty, return to the Repair Center of the relevant Regional Company.
Disposal	 <p><i>Dispose of the device as electronic waste in compliance with European directive 2002/96/EEC (WEEE) and not as municipal waste. Observe all corresponding national, legal regulations, and dispose of the device via appropriate channels. Observe all local and applicable laws.</i></p>

Connection diagrams

Connection diagram



Connection terminals

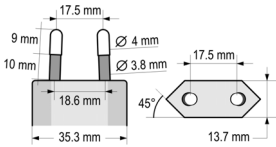


Pin assignment

Power plug add-on
on power unit

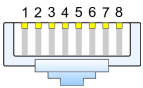
Type Euro plug as per EN 50075 and VDE 0620-1.

For AC 230 V



Ethernet plug

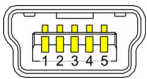
RJ45



1	Tx +	5	Not assigned
2	Tx -	6	Rx -
3	Rx +	7	Not assigned
4	Not assigned	8	Not assigned

USB plug

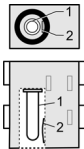
Type Mini-B



1	VCC	4	ID
2	D -	5	GND
3	D +		

External voltage plug

DC 24 V plug



1	DC 24 V (+)	2	GND (-)
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Dimensions

