

SuperWISE II a

Instructions for Use

20220331
Art. 1545229

Content

Symbol key	1
Application area.....	2
General.....	2
Electrical safety	2
Handling.....	2
Installation	2
Installation dimensions and weights	3
SuperWISE II / SuperWISE II SC.....	5
SuperWISE II 2K / SuperWISE II 2K SC	6
LED - Explanation.....	7
Use.....	8
Maintenance.....	8
Service/maintenance	8
Materials and surface treatment.....	8
Disposal.....	8
Product warranty	8
SuperWISE II / SuperWISE II SC.....	9
Control unit replacement	9
Retro-fitting Swegon Connect	9
SuperWISE II 2K / SuperWISE II 2K SC	10
Control unit replacement	10
Retro-fitting Swegon Connect.....	10
Technical data.....	11
Electrical data	11
References	11

Symbol key

Symbols on the machine.

This product complies with applicable EU directives



Symbols in this user manual

Warning/Caution!



Electrical voltage



The document was originally written in Swedish.

Application area

The product is a control unit designed for comfort ventilation within Swegon's system for demand-controlled ventilation WISE.

The product is used to collect ventilation and climate data and to optimise the operation of the air handling unit. SuperWISE also provides data that is available via the web interface.

SuperWISE SC offers a flexible cloud based service that permits communications between products, systems and users. By using Swegon Connect the system can be monitored and controlled remotely.

General



Read through the entire instructions for use before you install/use the product and save the instructions for future reference. It is not permissible to make changes or modify this product other than what is specified in this document. Place the cabinet so that it is not accessible to unauthorised persons.

The packaging contains the following items:

1 SuperWISE II / 1 SuperWISE II 2K / 1 SuperWISE II SC (Swegon Connect) / 1 SuperWISE II 2K SC (Swegon Connect)
1 x Instructions for use

Electrical safety



Permitted voltage, see "Electrical data".

It is not permissible to insert foreign objects into the product's contactor connections or the electronics's ventilation openings; as this entails a risk for short circuiting.

Ensure that the product is disconnected from the power supply when working on products that are not required to run.

Always follow local/national regulations regarding who may carry out this type of electrical installation.

Handling

- The product must be handled with care.

Installation

- Moist, cold and aggressive environments must be avoided.
- Avoid installing the product near a heat source.
- Assemble the product according to applicable industry regulations.
- Install the product so that it cannot be accessed by unauthorized persons.
- Install the product for easy access during service and maintenance.
- Install the product so that the cabinet door can open unobstructed.
- Check to make sure that the product does not have any visible defects.
- Check that the product is properly secured after it has been installed.
- Check that all cables are properly secured in place after they have been installed.
- Avoid installing the product on metal walls or by steel beams.

Installation dimensions and weights

SuperWISE II, SuperWISE II SC

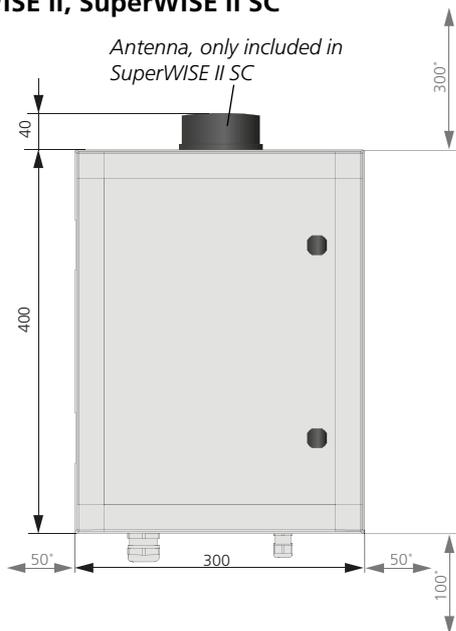


Figure 1. SuperWISE II, SuperWISE II SC, measurement figure (mm).
*Minimum free clearance to nearby installations.

SuperWISE II 2K, SuperWISE II 2K SC

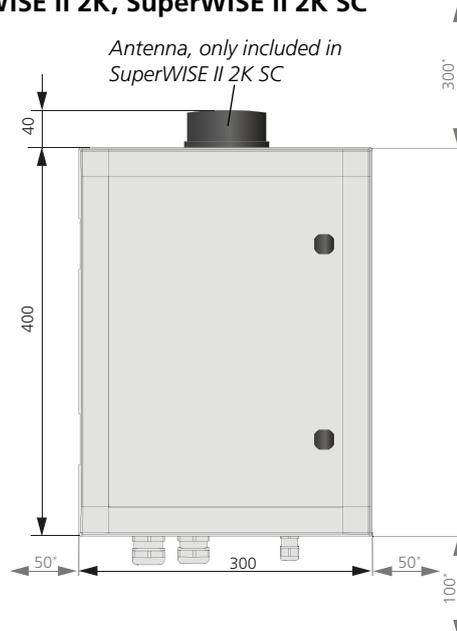


Figure 4. SuperWISE II 2K, SuperWISE II 2K SC, measurement figure (mm).
*Minimum free clearance to nearby installations.

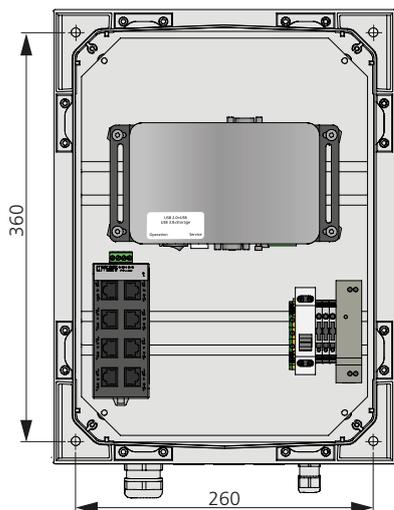


Figure 2. Holes for installation (mm), SuperWISE II, SuperWISE II SC. 4x installation screws (clearance hole $\varnothing = 8$ mm), screw selection based on the substrate.

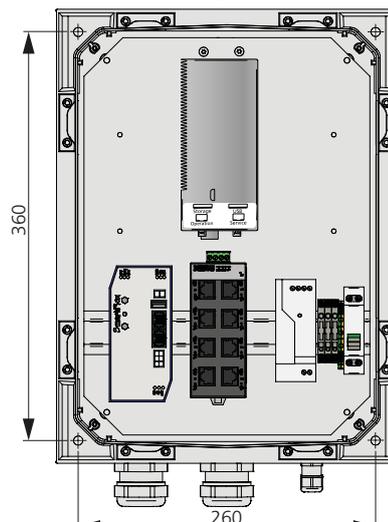


Figure 5. Holes for installation (mm), SuperWISE II 2K, SuperWISE II 2K SC. 4x installation screws (clearance hole $\varnothing = 8$ mm), screw selection based on the substrate.

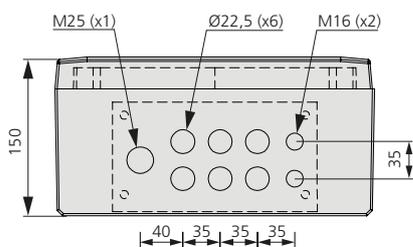


Figure 3. SuperWISE II, SuperWISE II SC underside, measurement figure (mm).

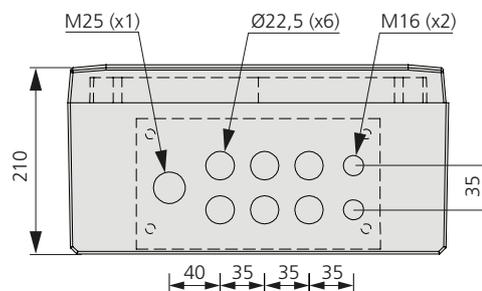


Figure 6. SuperWISE II 2K, SuperWISE II 2K SC underside, measurement figure (mm).

Weight (kg)	
SuperWISE II	5,8
SuperWISE II SC	6,3

Weight (kg)	
SuperWISE II 2K	7,1
SuperWISE II 2K SC	7,6

Connections



Connect the cables in the following order:

- A. Communication cables (see item 3 below)
- B. Power supply 230 V AC (see items 4 and 7 below)

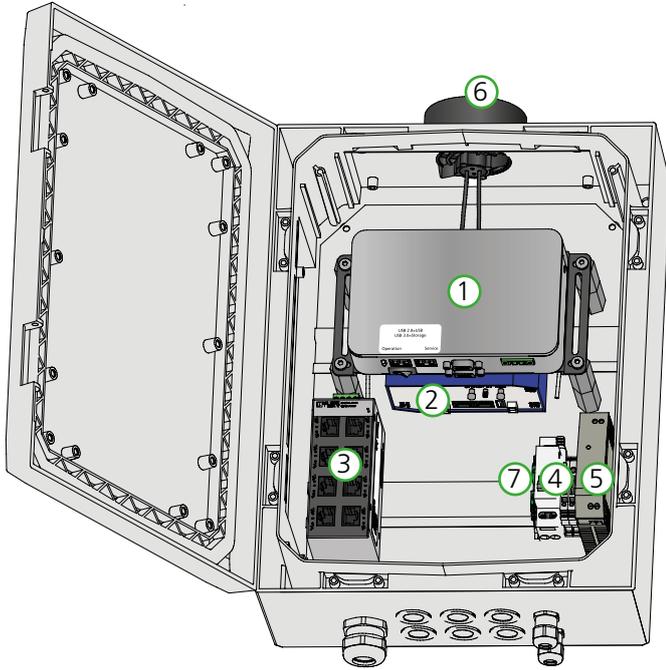


Figure 7. SuperWISE II, SuperWISE II SC.
NOTE! Swegon Connect (2) and antenna (6) only included in SuperWISE II SC.

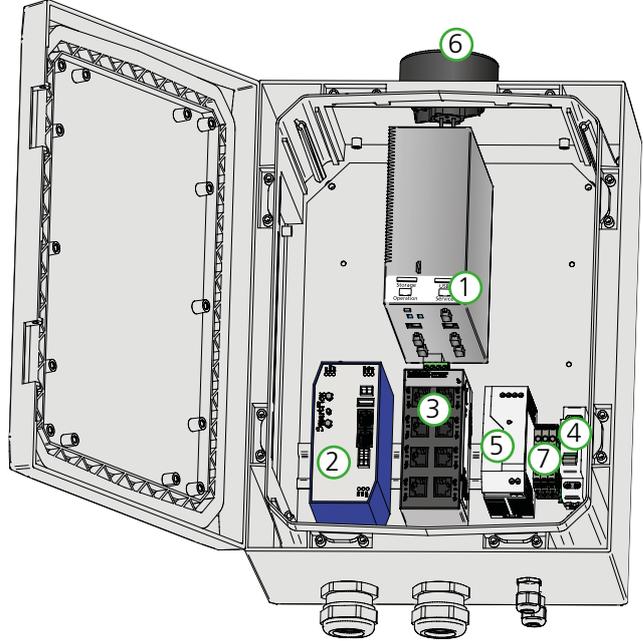


Figure 8. SuperWISE II 2K, SuperWISE II 2K SC.
NOTE! Swegon Connect (2) and antenna (6) only included in SuperWISE II 2K SC.

- 1. SuperWISE control unit - Main communication unit
- 2. Swegon Connect – Router (is only included in SuperWISE II SC/SuperWISE II 2K SC). Communicates on the mobile network and ideally on the 4G network. If the cabinet contains Swegon Connect, the cabinet must be placed so that it can receive mobile signals. The cabinet can be supplemented with an extra antenna for increased signal strength (see Accessories) for improved mobile coverage. See the separate documentation for Swegon Connect on www.swegon.com
- 3. Switch - 8 ports (if more ports are required, install a supplementary switch outside of the cabinet)
 - Port 1: SuperWISE control unit
 - Port 2: Swegon Connect
 - Port 3-8: Free for e.g. WISE DIR/AHU/BMS
- 4. Main switch - Connection of the power supply
- 5. Transformer
- 6. Antenna, only included in SuperWISE II SC/SuperWISE II 2K SC
- 7. Earth connection

SuperWISE II / SuperWISE II SC

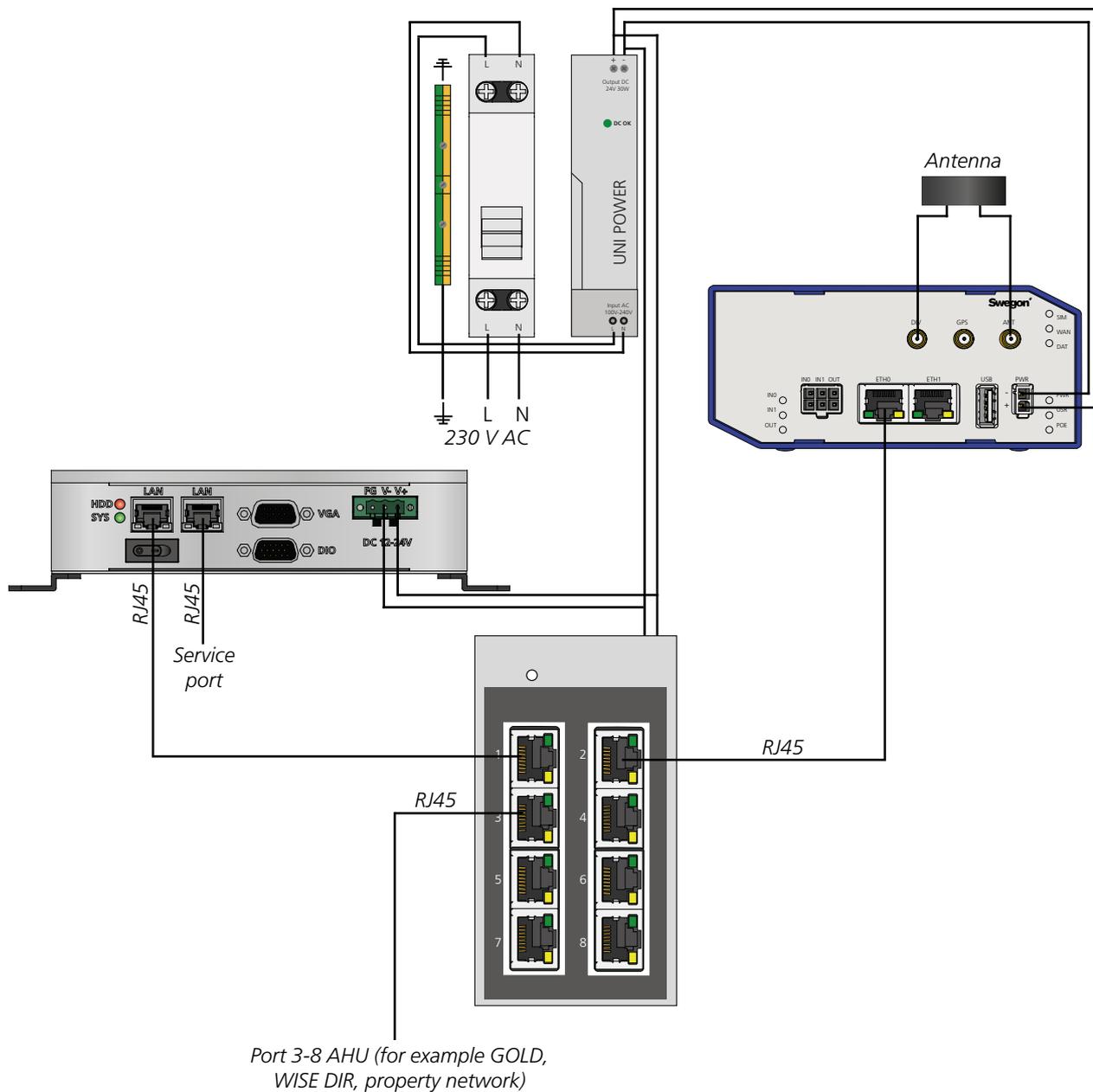


Figure 9. SuperWISE II, SuperWISE II SC, connection.

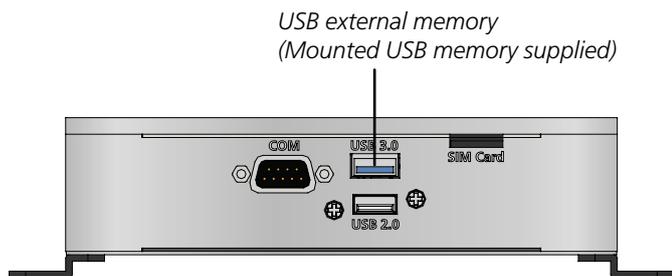


Figure 10. SuperWISE II control unit, top, connection.

SuperWISE II 2K / SuperWISE II 2K SC

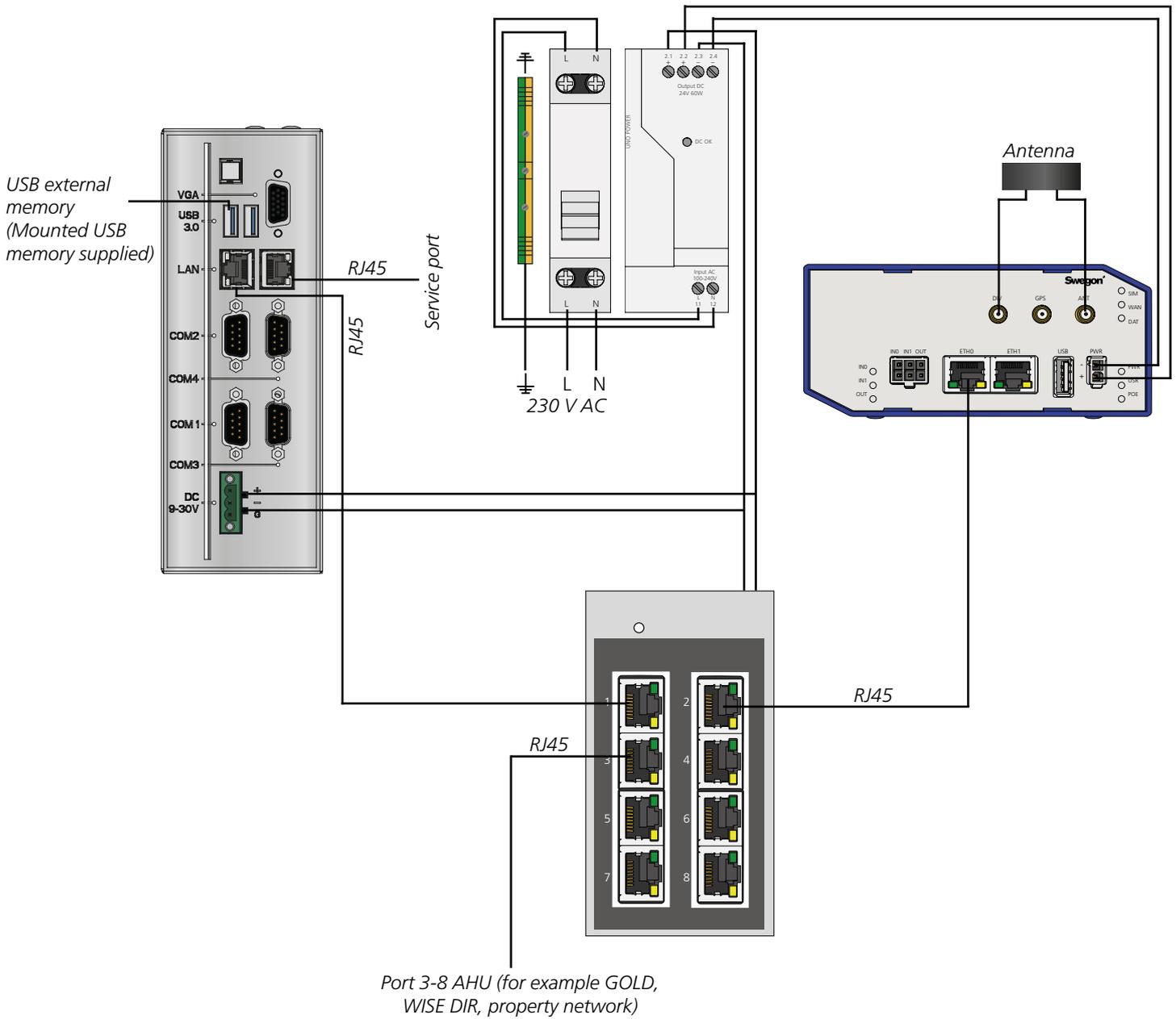
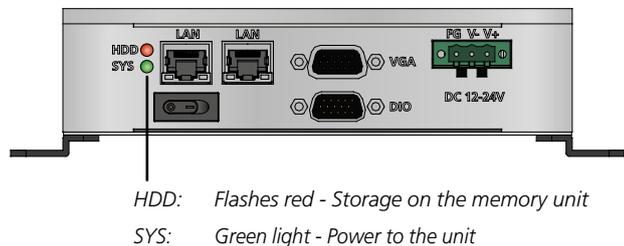


Figure 11. SuperWISE II 2K, SuperWISE II 2K SC, connection.

LED - Explanation

SuperWISE II control unit



HDD: Flashes red - Storage on the memory unit
 SYS: Green light - Power to the unit

Figure 12. LED key SuperWISE II control unit.

DC power supply

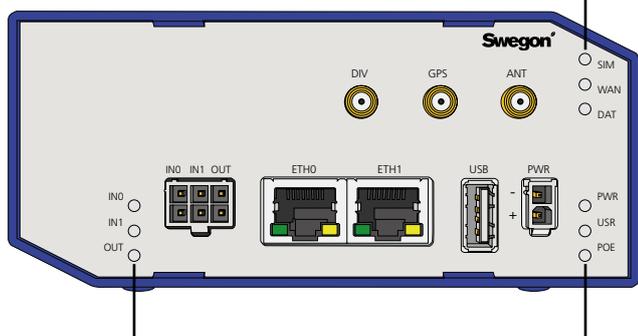


Green light when the voltage is on, goes out when the output voltage drops below 21.5V DC

Figure 13. LED key DC power supply.

Swegon Connect

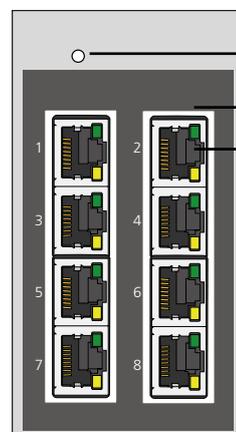
SIM: Steady green light with the SIM card is inserted
 WAN: Flashes orange if there is contact with the mobile network (2G, 3G or 4G)
 DAT: Flashes red when data is ready to send over the mobile network



Not used.
 PWR: Flashes green - power to the unit (Power)
 USR: "Spare"
 POE: Power over Ethernet, "Spare"

Figure 14. LED key Swegon Connect control unit.

Switch



Green light - power to the unit
 Green light - data being sent
 Orange diode denotes which communication rate is active
 Lit: 100 Mbps
 Not lit: 10 Mbps

Figure 15. LED key switch.

Use

Commissioning

Commissioning must be performed by qualified and trained WISE service engineers.

Trouble shooting

- Check that the cables are connected correctly.
- Make sure that the product is energized, the supply LED should be lit/flash green.
- Check the LED indications, see "LED key".
- Check the status on the SuperWISE user interface (web pages).
- Check that Swegon Connect is connected correctly and that the SIM card is inserted correctly.

Maintenance

Cleaning of electrical components

- If needed, use a dry cloth to clean the components.
- Never use water, detergent and cleaning solvent or a vacuum cleaner.

External cleaning

- If necessary use tepid water and a well-wrung cloth.
- Never use solvents.

Service/maintenance

- The product does not require any maintenance, except for any cleaning when necessary.
- It is not permissible to open or repair electrical components.
- If you suspect that the product or a component is defective, please contact Swegon.
- A defective product or component must be replaced by an original spare part from Swegon.

Materials and surface treatment

The cabinet is made of polycarbonate (PC), colour code: RAL 7035 (Industrial grey).

Disposal

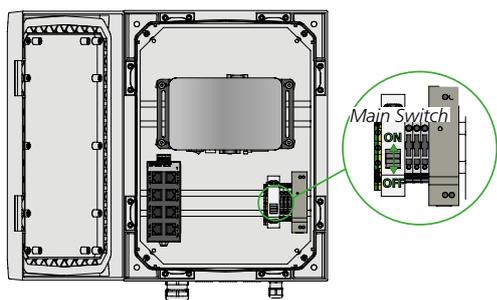
Waste must be handled according to local regulations.

Product warranty

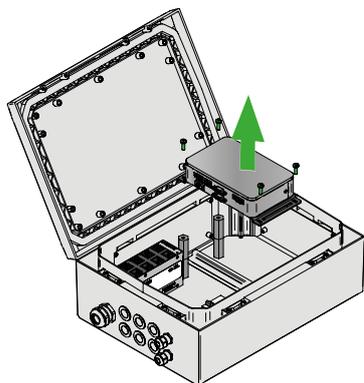
The product warranty or service agreement will not be in effect/will not be extended if: (1) the product is repaired, modified or changed, unless such repair, modification or change has been approved by Swegon AB; or (2) the serial number on the product has been made illegible or is missing.

SuperWISE II / SuperWISE II SC

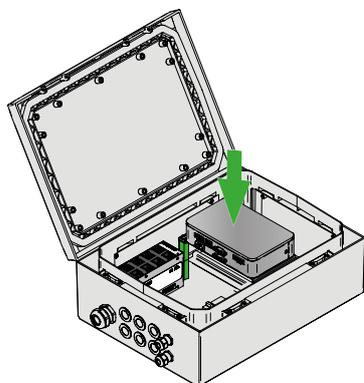
Control unit replacement



Turn off the power using the main switch before any work is started.



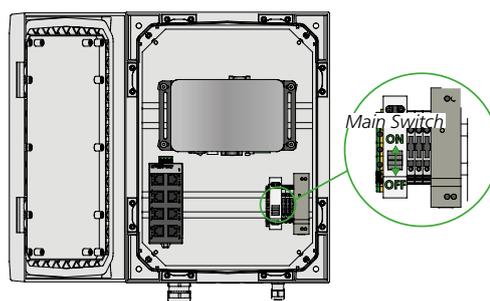
Disconnect all the cables to the control unit, loosen the four screws and lift out the control unit.



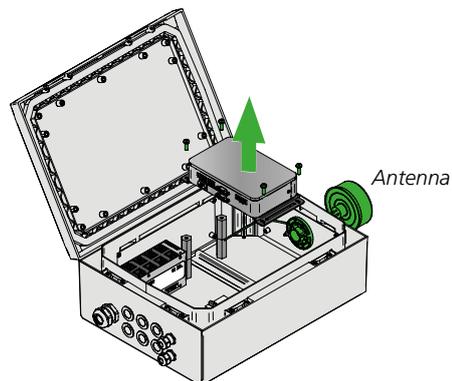
Place the control unit on the 4 spacer bolts and screw back the screws. Reconnect the cables and switch on the power using the main power switch.

Figure 16. Control unit replacement.

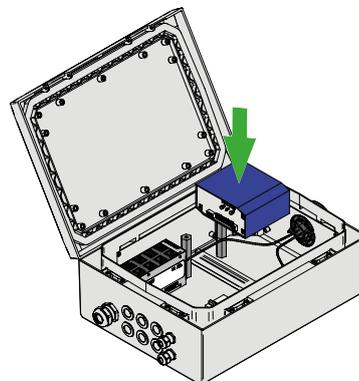
Retro-fitting Swegon Connect



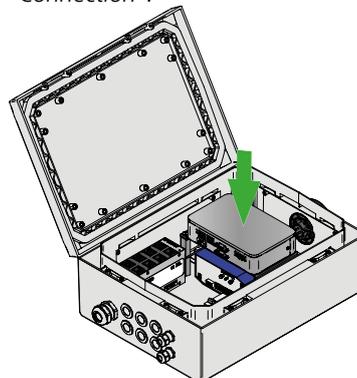
Turn off the power using the main switch before any work is started.



Disconnect all the cables to the control unit, loosen the four screws and lift out the control unit. Fit the antenna in the top of the enclosure and tighten the lock nut on the inside.



Fit a DIN rail-mount on Swegon Connect and mount on the DIN rail in the bottom of the cabinet. Connect the antenna and cables, see "Connection".

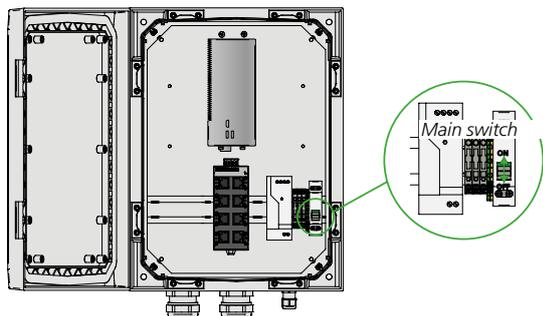


Refit the control unit and connect the cables. Switch on the power using the main power switch.

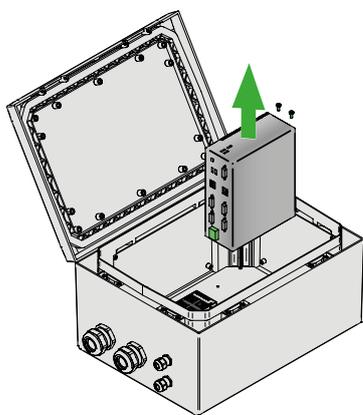
Figure 17. Retro-fitting Swegon Connect.

SuperWISE II 2K / SuperWISE II 2K SC

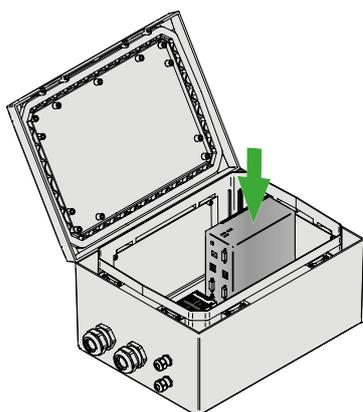
Control unit replacement



Turn off the power using the main switch before any work is started.



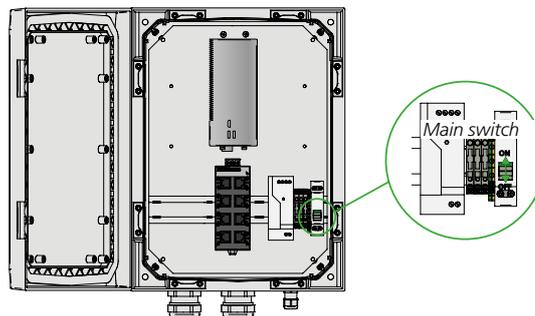
Disconnect all the cables to the control unit, loosen the two screws and lift out the control unit.



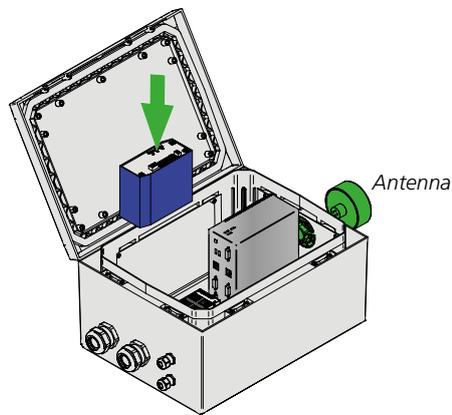
Place the control unit on the bottom of the cabinet and screw back the screws. Reconnect the cables and switch on the power using the main power switch.

Figure 18. Control unit replacement.

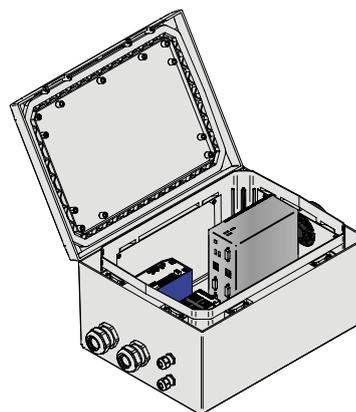
Retro-fitting Swegon Connect



Turn off the power using the main switch before any work is started.



Fit the antenna in the top of the enclosure and tighten the lock nut on the inside. Mount the Swegon Connect on the bottom of the cabinet.



Connect the cables and the antenna. Switch on the power using the main power switch.

Figure 19. Retro-fitting Swegon Connect.

Technical data

Output power (ERP) SuperWISE II SC/SuperWISE II 2K SC	
External mobile network:	Max. 2W (GSM mode)
Frequency band SuperWISE II SC/SuperWISE II 2K SC	
External mobile network:	900/2100... MHz
USB:	Type A
Switch/ Ethernet:	Switch supports 3 (Gold/AHU) + 3 outputs (WISE DIR)
IP class:	IP44
Ambient temperature	
Operation:	-20 – +50°C
Storage:	-40 – +80°C
RH:	10-95% non-condensing
CE marking:	2014/53/EU (RED) 2011/65/EU (RoHS2)

Electrical data

Power supply:	230V 10 A
Connections pipe dim.	
Power terminals:	Max. 2.5 mm ²
Suitable cable diameter through the chassis (screw terminals):	5-10 mm
Max. power consumption	
SuperWISE II:	34W
SuperWISE II SC:	34W
SuperWISE II 2K:	60W
SuperWISE II 2K SC:	60W

Declaration of Conformity

Swegon AB hereby declares that the radio equipment SuperWISE II / SuperWISE II SC / SuperWISE II 2K / SuperWISE II 2K SC conforms with the Directive 2014/53/EU and Directive 2011/65/EU.

The complete EU Declaration of Conformity is available at Swegon's website: www.swegon.com.

This declaration is applicable only if the product has been installed according to the instructions in this document and if no changes have been made on this product.

References

www.swegon.com

Building Materials Declaration

SuperWISE II product sheet

WISE System Guide

WISE User Manual

