Swegon Connect

Remote connection for
control, service and maintenance
of the indoor climate

Swegon

Swegon Connect - connection point for control, maintenance and monitoring!

Function

Swegon Connect is a communication unit that enables stable and remote access via mobile connectivity, to intelligent climate products and systems, which can facilitate monitoring, configuration, trouble shooting, service and maintenance. Remote access occurs via the built in router's mobile connectivity, to a cloud-based customer platform.

Swegon Connect (TBSC) is supplied preconfigured from the factory to use a fixed IP address. As standard, the product is equipped with one Ethernet port, however, if there is a need of more connections Swegon Connect can be supplemented with a switch (see accessories).

Examples of products that can be connected to Swegon Connect are: GOLD, SuperWISE, and other Swegon products with its own web server. Swegon chillers and heat pumps can be accessed via SMART Link in GOLD.

Hardware

The router is a 4G router for LTE and HSPA+ with support for up top 100 Mbit/s download speed. It is supplied with a preinstalled SIM card and a subscription for a mobile connection (4G, 3G, EDGE or GPRS), one Ethernet port, one I/O port and one USB 2.0 port (host). The router has a DIN rail adapter.

The router has, among others, support for DHCP server, NAT (Network Address Translation), NAT-T and Port Forwarding, functions to build an advanced flexible network.

Thanks to the router's built-in firewall, all connected products can simultaneously be connected to the property's local network. When connected to a local network, local IT security is taken into consideration and safeguarded. Connection to a local network occurs outside of Swegon Connect and comes under the local IT-department's responsibility.

Accessories

Climate systems are frequently placed in area that have limited signal strength for mobile communication. In these instances, Swegon Connect can be equipped with an extra antenna, and extension cable for either 1 or 10 metres, for placement where a stronger signal can be obtained. The antenna can be installed indoors and outdoors. The extension cable can also be used together with the existing magnetic antenna. The magnetic antenna is solely designed for indoor installation.

If there is a need to connect additional products (max 8 devices), Swegon Connect can be supplemented with a switch. The switch is equipped with a DIN rail adapter.

The Electrical cabinet accessory can be chosen when Swegon Connect needs to mounted outdoors or in other harsh environments.

Subscription for mobile connection

A 24 or 60 month M2M subscription for a mobile connection is included. The SIM card is fitted on delivery.

Swegon Connect can be configured to send a SMS alarm should the mobile connection go down.

Main benefits

- Alarm management
- Live data
- Logging historical data
- Location (site)
- Status updating
- Built-in firewall
- Mobile remote connection
- Problems can be identified and solved more rapidly
- Reduced costs for service and maintenance
- Mobile subscription included

Figure 1. Swegon Connect router.

Figure 2.Extra antenna (accessory, two antenna cables are required).

Figure 3. Extension cable, 1 or 10 m (accessory)

Figur 4. Switch (accessory).

Figure 5. Swegon Connect, tted in electrical cabinet.

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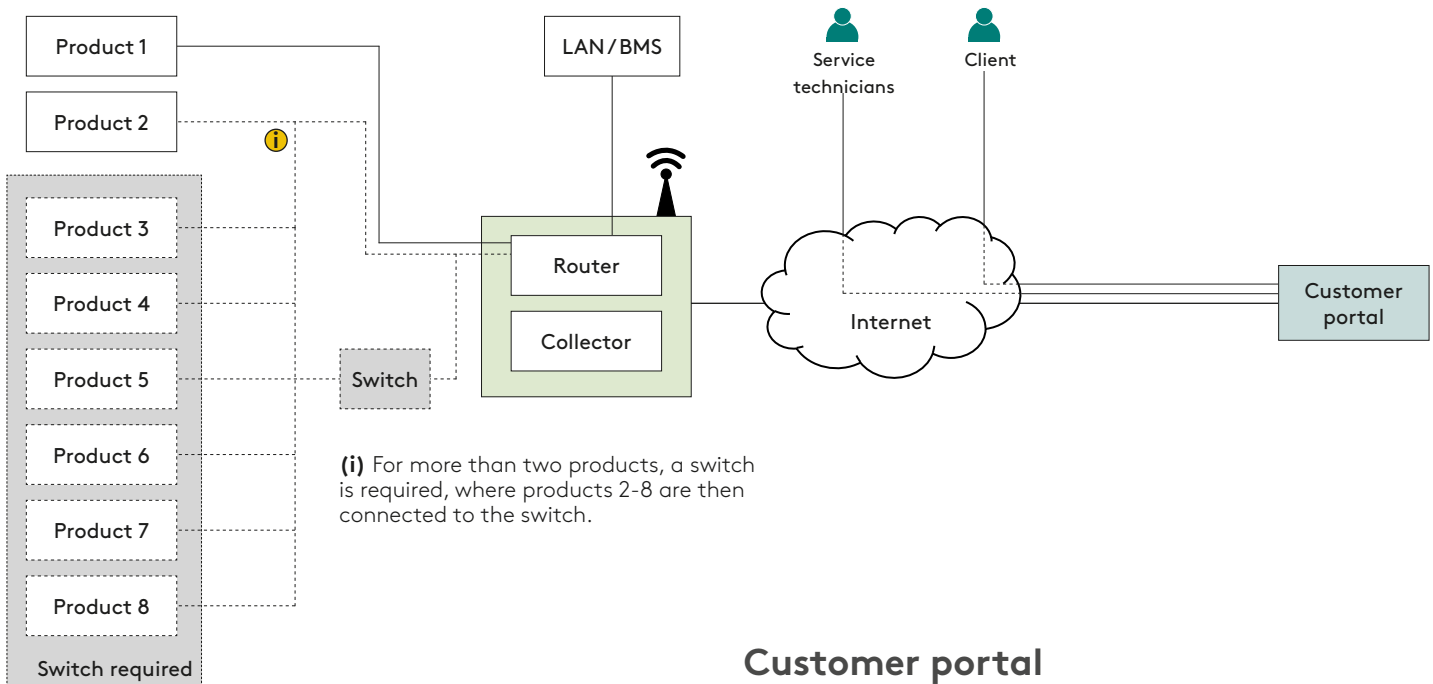
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Technical description

Figure 6. System overview and connections.

Application areas

Swegon Connect makes it possible to remote connect to climate products and systems, without access to the network. It is possible to configure and optimise devices via the remote connection.

Using Swegon Connect, Swegon can quickly provide support and solve certain tasks remotely. In addition to time savings, the environment also benefits thanks to fewer trips. When a technician still needs to be on site, a solution can be identified in advance, enabling the correct measures to be taken immediately.

Previously there have been problems, when in some cases for security reasons, access to existing networks is not permitted. With Swegon Connect's separate inputs for building networks, and the in-built intermediate firewall, protected access is possible from two directions. When connected to a local network, local IT security is taken into consideration and safeguarded.

Swegon Connect works for Swegon products with a built-in web page, some examples:

- GOLD
- SuperWISE
- COMPACT

Swegon Connect is approved for outdoor installation with the Electrical cabinet accessory.

Customer portal

Swegon Connect is interconnected with a cloud-based service where all communication between products and the user are managed. The customer portal page, where connected products can be managed and monitored, is reached via Swegon's website or directly via the encrypted address *https://swegonconnect.com*.

Safety

Swegon Connect offers several different security levels and functions to guarantee a secure connection, without access for unauthorised persons. Login is conducted via the customer portal's encrypted website using a unique username and password. Connected products are also protected by separate login procedures.

Each router is equipped with a unique certificate for the highest security. The router's default settings cannot be reached by external users. The router is equipped with an internal firewall between both these Ethernet ports, which prevents traffic from a mobile connection to e.g. a property network. The router's data traffic can be activated/deactivated via SMS, which can be managed by registered users.
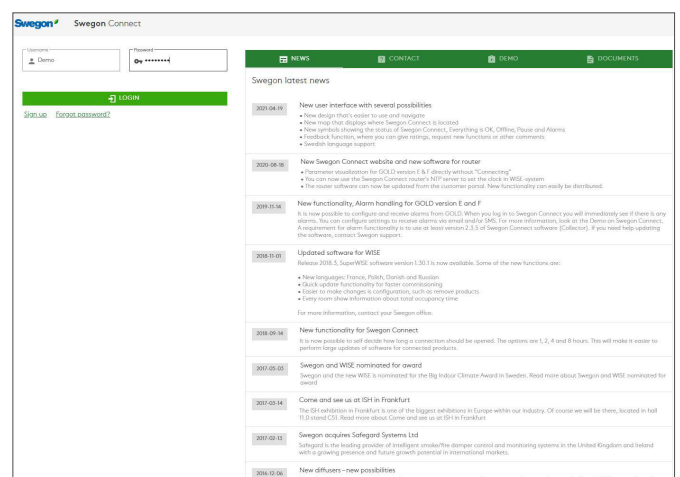
Connections

A computer with web browser is required for managing and operating Swegon Connect. In addition, support for Java applications is required for the configuration of certain connected products.

Swegon Connect uses a mobile connection for remote connection. The climate system is connected to Swegon Connect via Ethernet for additional access to each product's website.

For detailed information about how underlying climate products and systems are interconnected, see the documentation and information on www.swegon.com.

Figure 7. Swegon Connect router with accessories supplied on delivery.

* Swegon Connects router is of the model – Advantech Cellular LTE Router (SR30300011)

Technical data

Technical data		
Supply voltage		230V AC, max. 10A
Frequency range	4G	800, 900, 1800, 2100, 2600 MHz
	3G	900/2100 MHz
	GSM	850/900/1800 and 1900 MHz
Speed	LTE	100 Mbit/s (down), 50 Mbit/s (up)
	HSPA+	21.1 Mbit/s (down), 5.76 Mbit/s (up)
Support for		SNMP, SNMP traps, DHCP, NAT, NAT-T, IPsec, OpenVPN, L2TP, VRRP, PPPoE Bridge, DynDNS, NTP, VRRP, HTTPS, SSH, OSPF, RIP, BGP, QoS, RIP, BGP, OSPF, PPTP etc
Interface		Ethernet, USB-Host (type A), I/O-port
Interface (option)		7 extra ports Ethernet (switch)
Antenna connector		SMA 50 Ω (4G/3G/LTE450/GPS), RP-SMA 50 Ω (WiFi)
CE-approved according to		EN 301 511, EN 301 908-1, EN 301 908-2, EN 301 908-13, EN 301 489-1, EN 60950-1
Enclosure class		IP30 (IP65 with Electrical cabinet)
Ambient temperature at relative humidity		-40 to +75°C 0–95 %
Dimensions (W x H x D)		55 x 97 x 125 mm
Weight		310 g

Specification

Product

Swegon Connect*	**TBSC**	**-1**	**-a**
Swegon Connect, delivered loose		= 1	
Swegon Connect, fitted in electrical cabinet		= 2	
Swegon Connect and switch, fitted in electrical cabinet		= 3	

Accessories

Extra antenna for increased signal strength	**TBRX**	**-2-11**	

Extension cable for antenna	**TBRX**	**-1-12**	**-aa**
1 m			= 01
10 m			= 10

Switch (up to 7 extra products)	**TBSX**	**-1-14**

Subscription 2+3 years (3 Additional subscription years)	**TBSX-3**

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