



INSIDE Connect

Installation instructions

1. Mount and use

1.1 First use

Before you put the router into operation, it is necessary to connect components that are needed to run your application.

1.2 Network (Ethernet)

The router has a standard network port (RJ45) for connecting products (fig.1).

If additional connections are required, use the switch accessory (fig.2).

Please contact Swegon for adapting the router to a BMS connection.

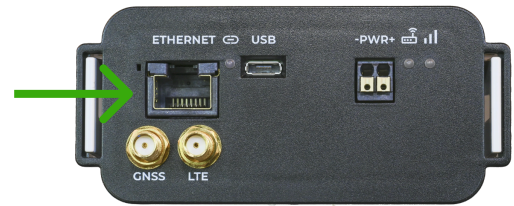


Figure 1. Ethernet port on router.



Figure 2. Switch for additional connections.

1.3 Power

The supplied transformer must always be used to connect the router to the power grid (fig.3a).

1. First, connect the power cable to the router and make sure they are firmly attached.
2. Then connect the transformer's power plug to an electrical outlet.

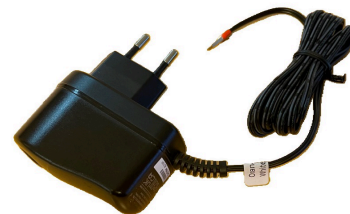


Figure 3a. Power supply unit.

Important!

If the router is delivered in an electrical cabinet, the installation must be carried out by a qualified electrician. The electrical connection is made to the circuit breaker within the cabinet (fig.3b).

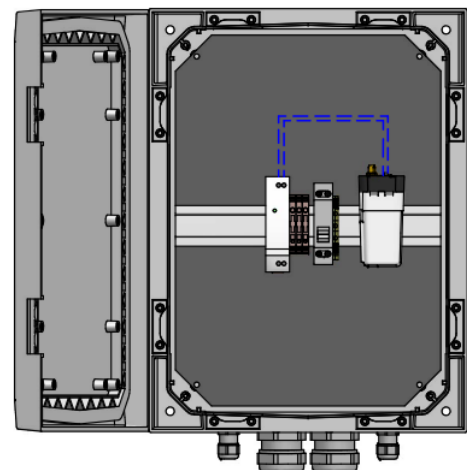
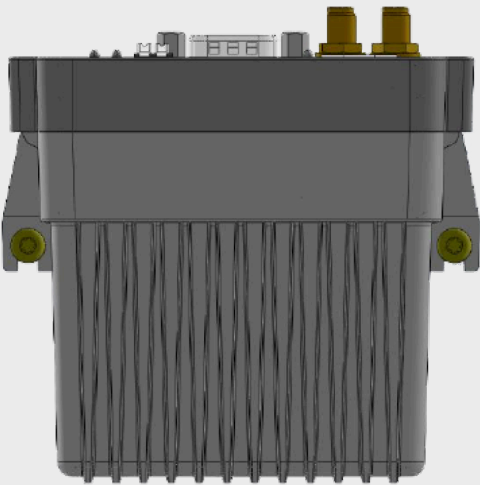


Figure 3b. Router mounted in electrical cabinet.

Mounting DIN-rail / Bolt-on

The INSIDE Connect router is supplied with a bracket that fits DIN rail and bolt-on fastening. If the router is ordered with an electrical cabinet, the router (and any optional switch) is already mounted upon delivery.

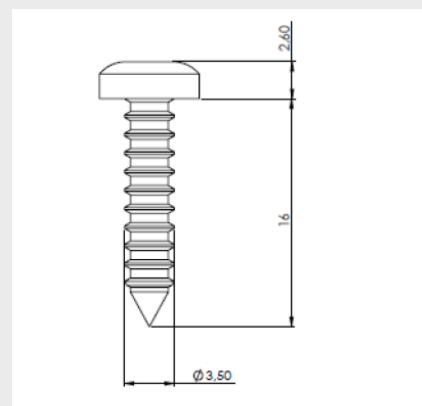


Installation with screws


If the router is to be loosely mounted with screws, the router should be mounted with the connectors facing upwards (as shown on the left). This is to minimise the risk of the unit coming loose and falling to the ground and being damaged.

Screws

When the INSIDE Connect modem is mounted using screws, screws with the following specification (or equivalent) should be used: RTS ST3,5X9,5 ISO14585 T15 A2K, as illustrated in the drawing.



Setup process - 5 steps to success!

- 
- Get access to INSIDE Portal
 - Add products to building
 - Request service (INSIDE Connect)
 - Add router to building
 - Connect products to router

Guide starts on the next page..

2. Set up INSIDE Connect

INSIDE Connect is a service hosted on INSIDE Portal. A computer or a phone with a web browser is required for managing and operating INSIDE Connect. INSIDE Connect uses a mobile connection for remote connection. The climate system is connected to INSIDE Connect via Ethernet for additional access to each product's website.

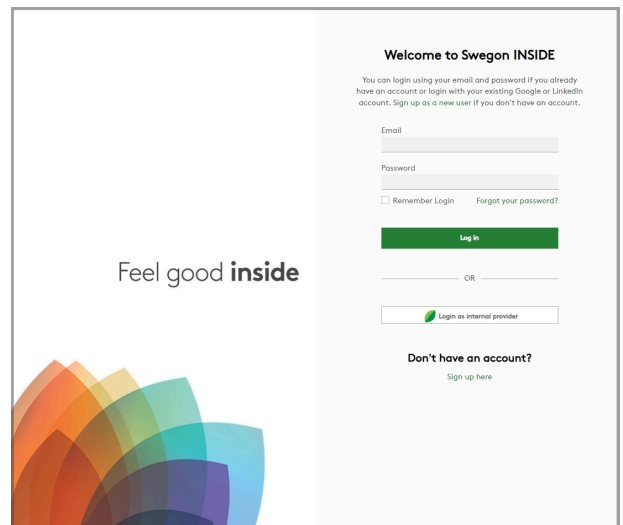


Figure 4. Log in screen to INSIDE Portal

2.1 New users

All INSIDE Connect users must have an INSIDE Portal-account and be invited to an organisation to be able to log in and use this service. Visit <https://www.swegon.com/support/software/connected-products/> and request access to INSIDE Portal (fig. 5).

In the following step, you will be asked to enter your details in a form. Once your account, organisation and building are created, you will receive an email with an invitation to the INSIDE Portal.

Once you have an INSIDE Portal account (and are invited to an organisation) you can invite other users to your organisations and buildings.

Figure 5. The form to request access to INSIDE Portal.


2.2 Connect units to INSIDE Portal

Before you can start using your INSIDE Connect router, you need to claim your Swegon units on the INSIDE Portal.

2.2.1 INSIDE Ready products*

Go to <https://www.swegon.com/support/software/connected-products/> to find the guide on how to connect your INSIDE Ready unit to Swegon INSIDE.

2.2.2 Non INSIDE Ready products & 3rd party products

1. Log in to INSIDE Portal and go to the building where you want to add a product.
2. Press the button  and follow the steps.

2.3 Request service INSIDE Connect

Please note that INSIDE Connect is charged per product connected to the service. To order this service, you must be a registered customer of Swegon. See current price list on Swegon's webpage.

Contact insideconnect@swegon.com for help.

Once the products have been successfully added to INSIDE Portal, it is time to send a request for the product(s) you want VPN access to.

1. Go to the service page, found in the left side menu in INSIDE Portal (fig.7).
2. Select each product that you want to activate INSIDE Connect for. It is only possible to submit one product at a time (fig.8).

Send an email to insideconnect@swegon.com with 'INSIDE Connect' as the subject. Please state following information in the email:

- Your Swegon Customer number (optional)
 - Name of the organisation & building (in INSIDE Portal)
3. Wait for our email reply.
While waiting for the email, you can complete the steps in 2.4.

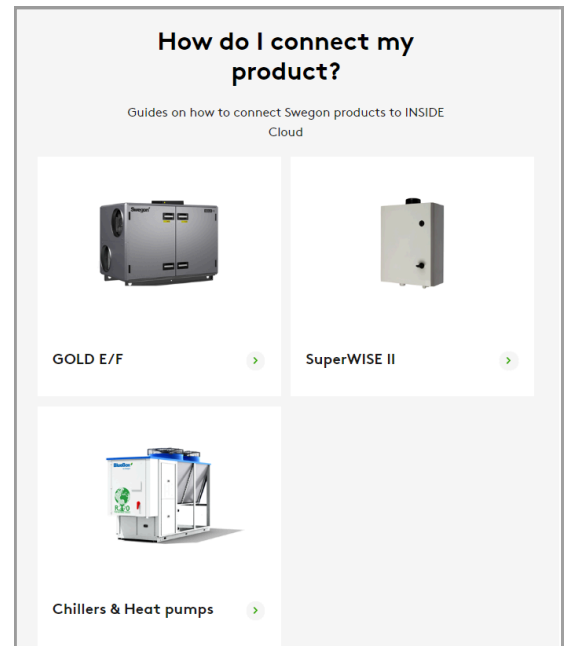


Figure 6. Guides on how to connect & claim INSIDE Ready products.
*The above products are INSIDE Ready.

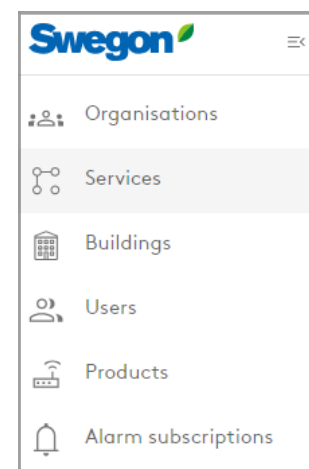


Figure 7. Services page in INSIDE Portal.

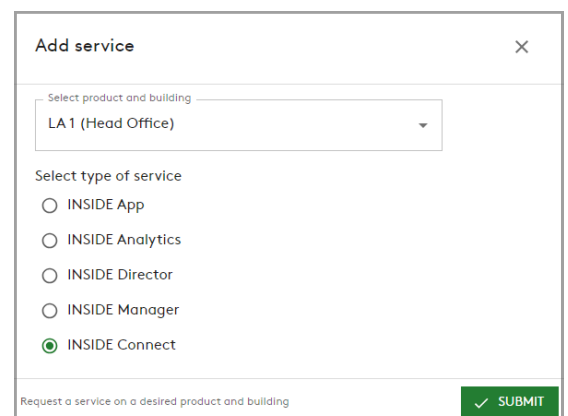
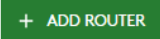



Figure 8. Request INSIDE Connect as service to a product.

2.4 Router registration

To register a router, log in to the INSIDE Portal.

1. Go to the building view and click on the tab "INSIDE Connect routers".
2. Press the button  in the top left corner (fig. 9).
3. Fill in the information requested and then press  (fig. 10).

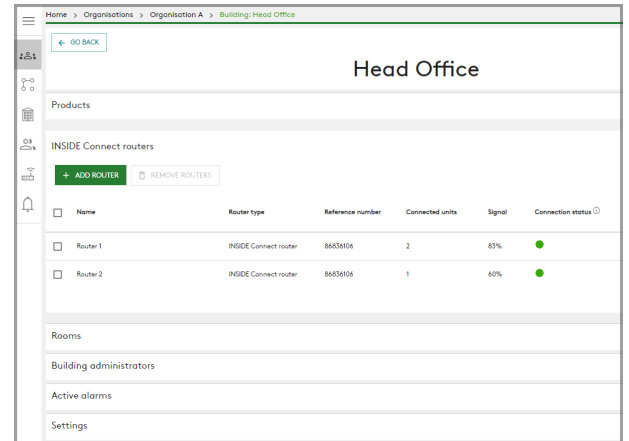


Figure 9. Add new router to building.

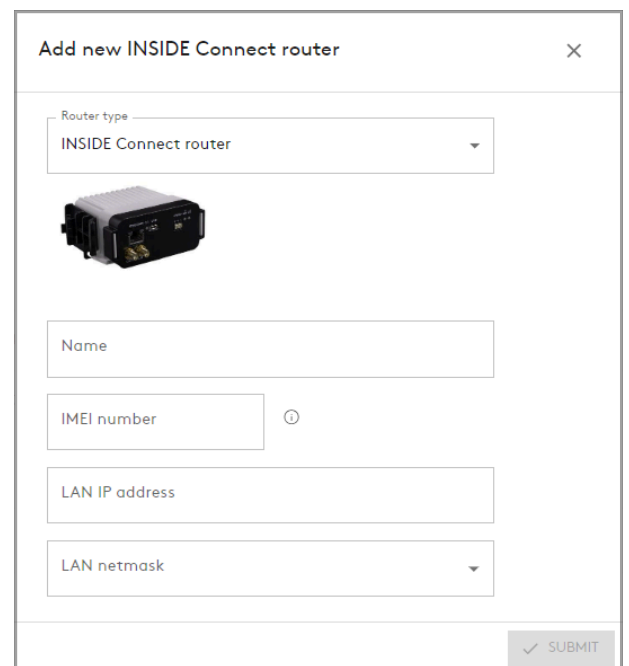



Figure 10. Fill in information about router.

2.4.1 Change router's IP settings

In some cases it may be necessary to change the IP settings for the router. This may be the case, for example, if there is a BMS network with locked IP series.

1. Go to the router that you want to edit.
2. Go to settings.
3. Press the  button.

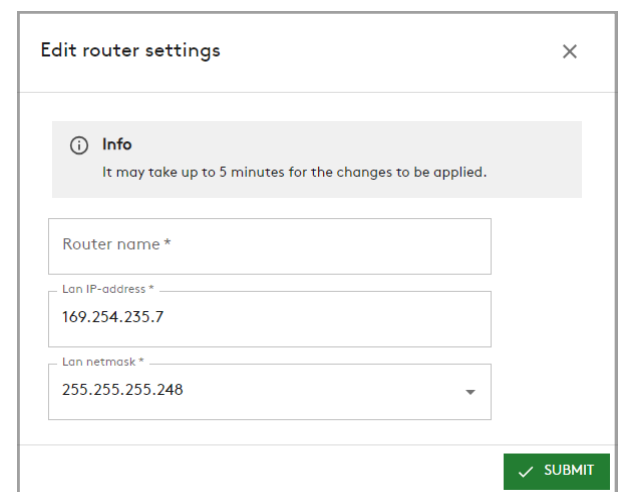


Figure 11. Edit router settings.

2.5 Connect products to your router

Note! Remember that a product must be claimed in INSIDE Portal and have the service INSIDE Connect as active before you can connect it to your INSIDE Connect router.

To connect a product to your router you need to link it with the right IP-address. Start by going to the router page.

1. Press the button 

Each individual product has its own unique IP address.

2. Add a product by using the dropdown list and enter the product's IP address and port for each product that you want to link (fig.13-14).

3. Press the  button (fig. 14).

The settings are now forwarded to the INSIDE Connect router. Note that it can take up to 10 minutes for the changes to be applied.

Configuration of the product's IP settings should not be done in INSIDE Portal, but preferably on the connected products. Each product must be configured for a fixed IP address and thus use one of the IP addresses in the range obtained from INSIDE Connect.

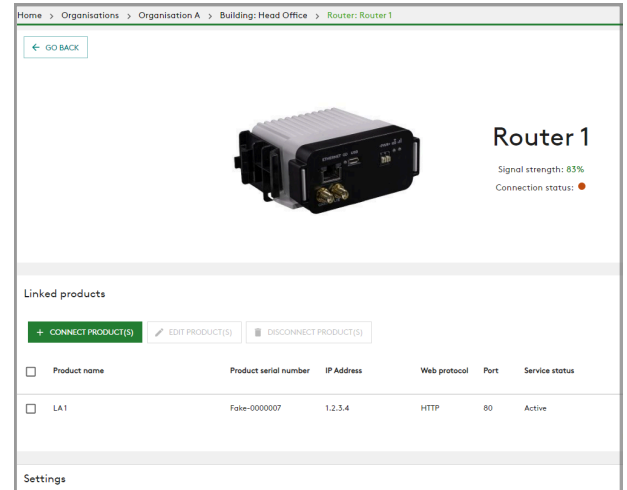


Figure 12.

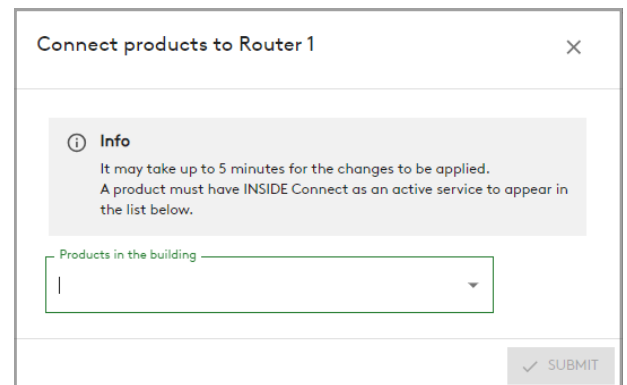


Figure 13.

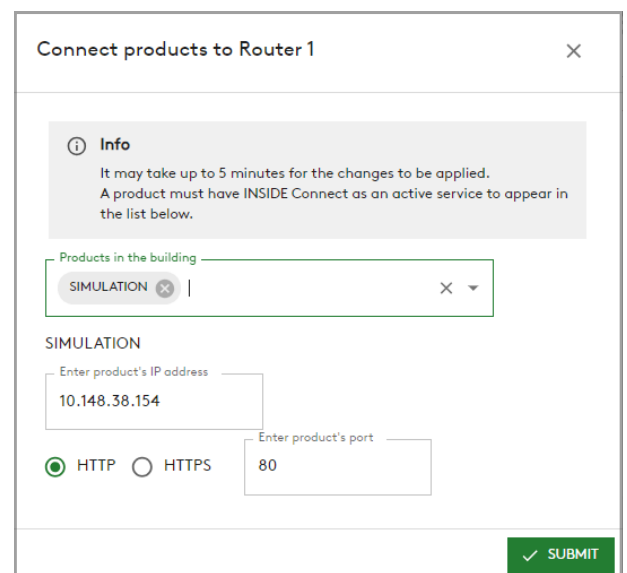


Figure 14.

3. Use INSIDE Connect

Once the INSIDE Connect service is activated and the product is connected to a router, the INSIDE Connect button will turn green (fig 15).

Use this button to connect to the product's internal website via a secure VPN tunnel.

By pressing the arrow on the right side of the button, you can choose a longer connection time than the default 30 minutes.

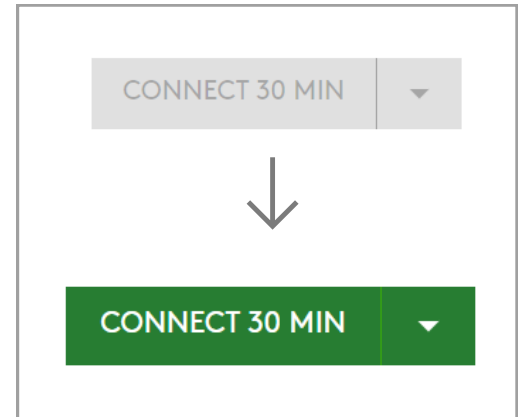


Figure 15.

3.1 INSIDE Connect and the connection to INSIDE Cloud

The figure below shows how the INSIDE Connect is related to INSIDE Portal and INSIDE Cloud. Note that only Swegon products that are INSIDE Ready can share data to INSIDE Cloud. The VPN service works even if data is not shared with INSIDE Cloud.

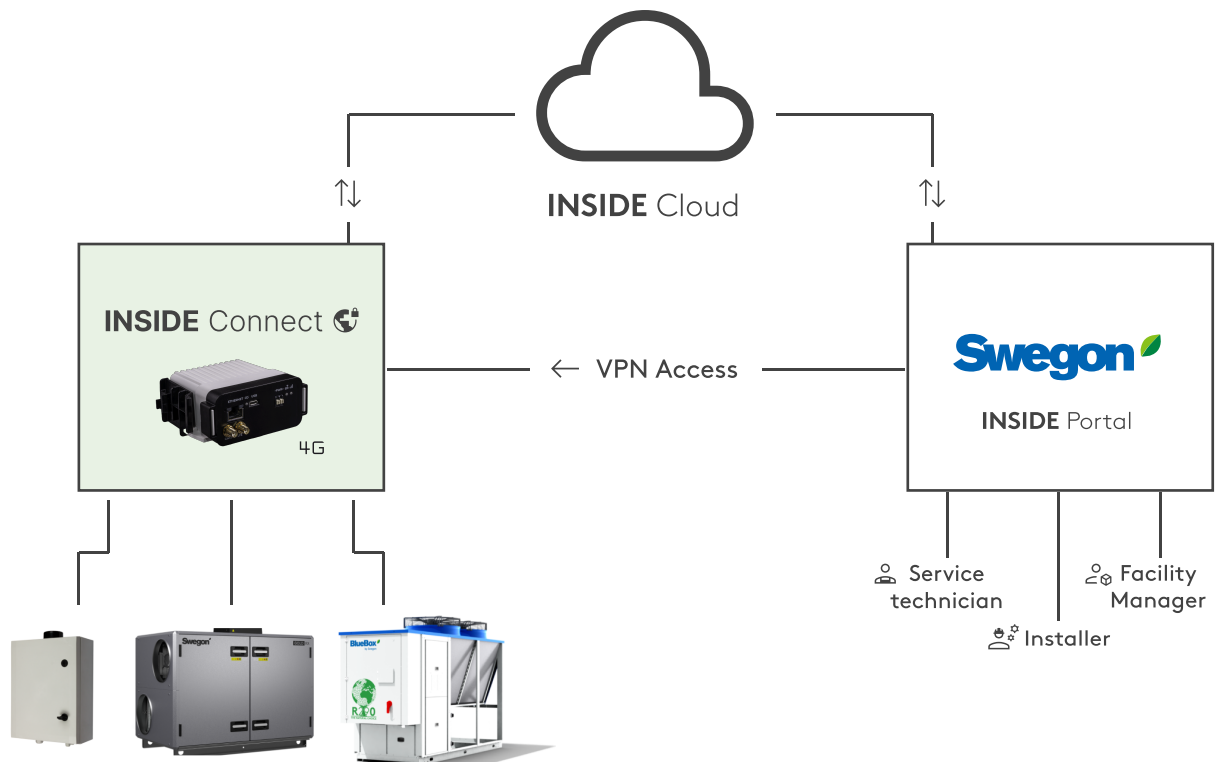


Figure 16. INSIDE Connect's relation to INSIDE Portal and INSIDE Cloud.

4. Product specific information

Connection between INSIDE Connect and products such as GOLD and SuperWISE may vary depending on version and design. External products and networks are additional factors to consider.

In the following pages we will show how to configure different products to use the INSIDE Connect service.

4.1 GOLD units

4.1.1 GOLD version E or later

Connect the cable from the INSIDE Connect router to one of the Ethernet ports on the air handling unit's control card. Select port A if no other networks or air handling units are present, otherwise port B (fig. 17). The cable should be connected to the Ethernet port on the INSIDE Connect router or to the switch when used.

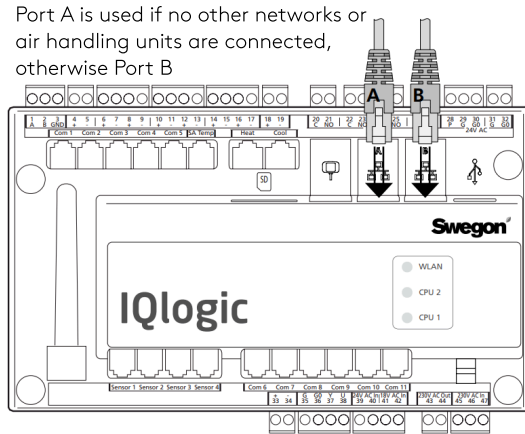


Figure 17. Ethernet cable from INSIDE Connect to GOLD IQlogic control card.

4.1.2 Several air handling units with changed network settings

When connecting two or more GOLD air handling units, the first air handling unit may have maintained its network settings, while the IP addresses of the subsequent air handling units must be corrected to avoid a conflict. The default gateway must be the same for all products connected to INSIDE Connect (fig. 18-20).

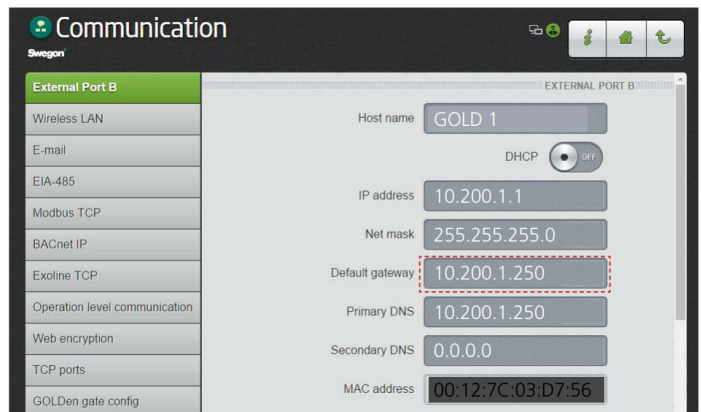


Figure 18. Network settings in GOLD AHU 1.

Example

This example shows the connection of 3 GOLD air handling units. First make sure that the products have INSIDE Connect as an active service.

Connect the products (section 2.5) and set the IP addresses according to the IP addresses for each product e.g. 10.200.1.1 and 10.200.1.2 from the example here.

Set the "IP address" and "Default Gateway" in the GOLD air handling unit, via its handheld terminal or web page.

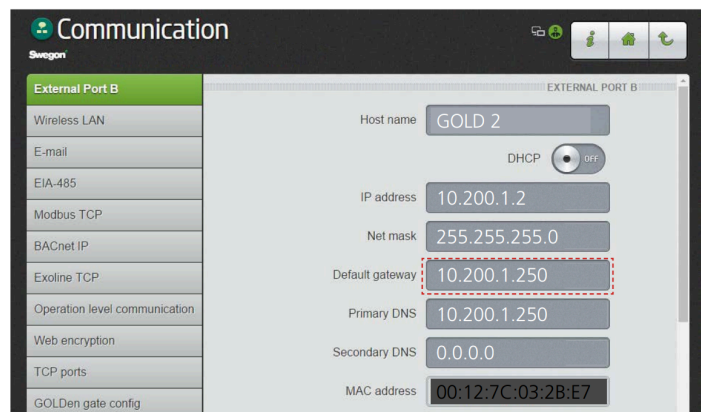


Figure 19. Network settings in GOLD AHU 2.

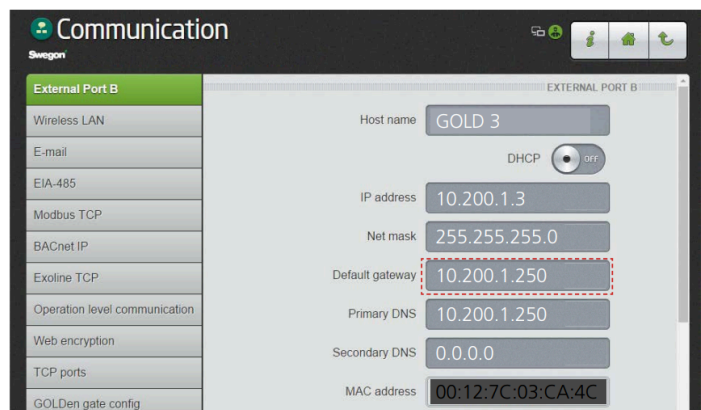


Figure 20. Network settings in GOLD AHU 3.

4.1.3 GOLD version C or D

The air handling unit settings must be adapted prior to connecting to INSIDE Connect. This requires you to log in at installation level or service level. Set the "IP ADDRESS" and GATEWAY" in the GOLD air handling unit, via its handheld terminal or web page. The settings are found under SETTINGS, COMMUNICATION and ETHERNET. These values should be the same as for products' IP address in INSIDE Portal. Connect the cable from the INSIDE Connect router to the Ethernet port on the air handling unit's control card (Fig. 21). The cable should be connected to the Ethernet port on the INSIDE Connect or to the switch when used. Go to the registered router in INSIDE Connect and set the network settings so that they correspond to those of the air handling unit.

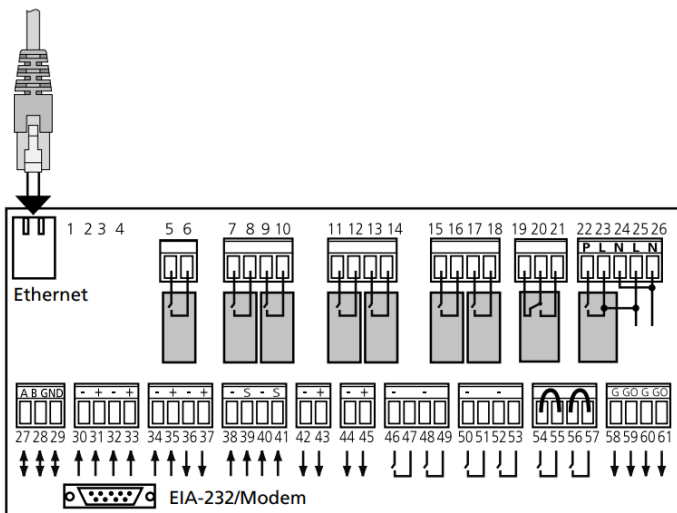


Fig.21 Ethernet cable from INSIDE Connect to GOLD IQnomic control card.

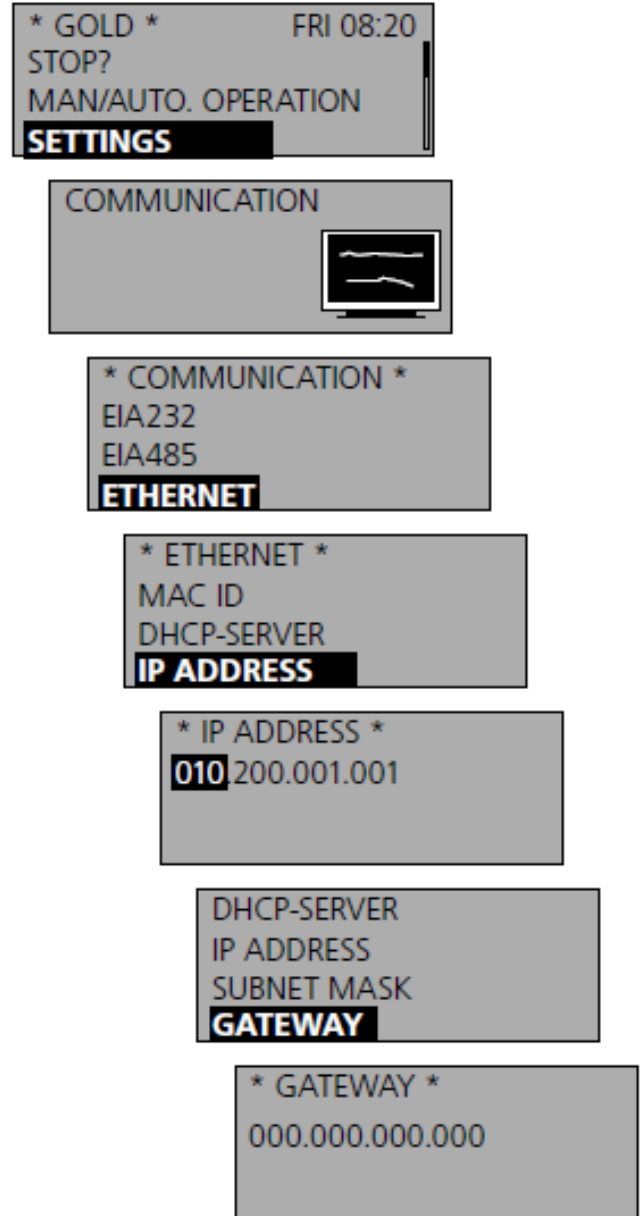


Fig. 22. Network settings in GOLD AHU, version C or D.