impHub Quick Start

Installation Requirements

You will need <u>ALL</u> the following, before you go to site.

1. You will need to bring your laptop to site, so you can configure the impHub

2. Network IPs
   - Ask your network engineer to assign a fixed IP for the impHub and setup your firewall to allow outbound internet access from the impHub's IP.
   - You will also need one fixed IP address for each additional device, for example battery systems.
   - Your network engineering may choose to use a static IP address or DHCP with a reserved IP address.

3. A power supply

> **PSU Specification**
> - Power Input Range: 12 ~ 24 VDC, 1.39 ~ 0.72A (16.68~17.28W)
> - Protection: OVP(±20%), reverse protection

   - Example: MEAN WELL DIN Rail Power Supply (https://uk.rs-online.com/web/p/din-rail-power-supplies/1222208)
   - Example: RS PRO Plug Top Power Supply (https://uk.rs-online.com/web/p/ac-dc-adapters/2012631), replacing round connector with the supplied connector block
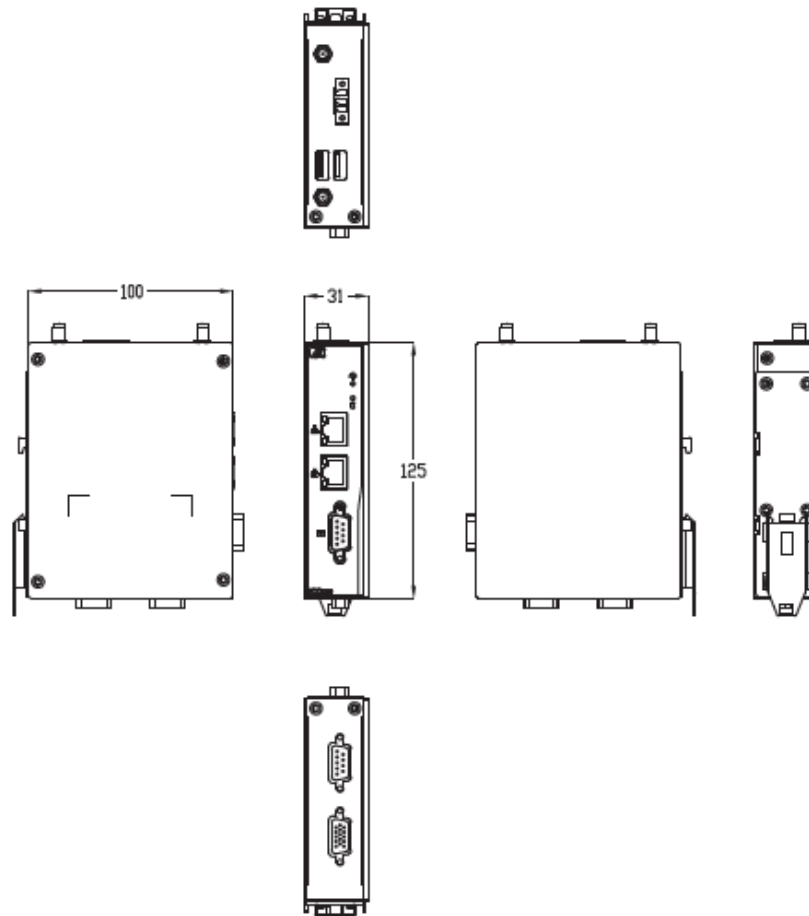

4. An ethernet patch lead.

5. A space on the DIN rail inside a suitable IP rated enclosure.

Dimensions

The impHub needs to be mounted in a suitable IP rated enclosure to maintain the following operating conditions:

Operating Conditions

Operating Temperature	-20°C ~ +70°C (-4°F ~ +158°F) -40°C ~ +70°C (-40°F ~ +158°F) (ICO120-WT)
Humidity	10% ~ 95%
Vibration Endurance	2 Gms (5 ~ 500Hz, amplitude 0.35 mm; operation/storage/ transport)
Weight (net/gross)	0.3 kg (0.67 lb)/0.46 kg (1 lb)
Certificate	CE FCC Class A
Dimensions	31 mm (1.22") (W) x 100 mm (3.93") (D) x 125 mm (4.92") (H)

Pre-Installation Checklist

Please <u>COMPLETE</u> this check-list, before you go onto site.

impHub Installation

Item	Response
Customer Account Name	
Building Name	
Installing Engineer Name	
DIN Rail Available	Yes/No
Power Supply Ordered	Yes/No
Ethernet Cable Ordered	Yes/No
Ethernet Switch Port Identified	Yes/No
impHub IP Address Allocated	<IP Address>
Firewall configured for external access	Yes/No

Solar Monitoring

Item	Response
Solar Peak Power (kWp)	
Solar spec available for control block config	Yes/No
Onsite Solar Monitoring Meter Type	
Onsite solar metering IP	<IP Address>

Battery Setup

Item	Response
Battery Manufacturer	
Battery Model	
Battery Serial number	
Battery System IP Address	<IP Address>
Site MIC (kVA)	
Site MEC (kVA)	
Battery Power (kW)	
Battery Storage Capacity (kWh)	

Tesvolt systems

Item	Response
Janitza IP Address	<IP Address>

Victron systems

Item	Response
Victron system Modbus id	
Victron battery system Modbus id	

EV Setup

Item	Response
Charger Manufacturer	
Charger Model	
Charger Power	
OCPP 1.6J Compatible	Yes/No
Charger Already On Site Network	Yes/No

HVAC Setup

Item	Response
HVAC Manufacturer	
HVAC Model	
HVAC Power	
BACnet Compatible	Yes/No
BACnet Controller Adapted with Boost Supress Objects	Object Names
Metering Available via BACNet	Object Names Active Power and Active Energy

Installation Steps

STEP 1
Unbox your impHub appliance.

STEP 2
Install your impHub in a suitable cabinet of the named building.
> ➢ *The impHub is DIN Rail mounted and requires a 24V DC PSU at 17W, which you must provide. The operating conditions are specified above.*

STEP 3
Connect your laptop with an ethernet cable to the impHub ethernet port 1 (the upper port), this is fixed to IP 192.168.1.1.
> ➢ *You need to configure your laptop ethernet address to a fixed address in the subnet 192.168.1.X for example 192.168.1.2*
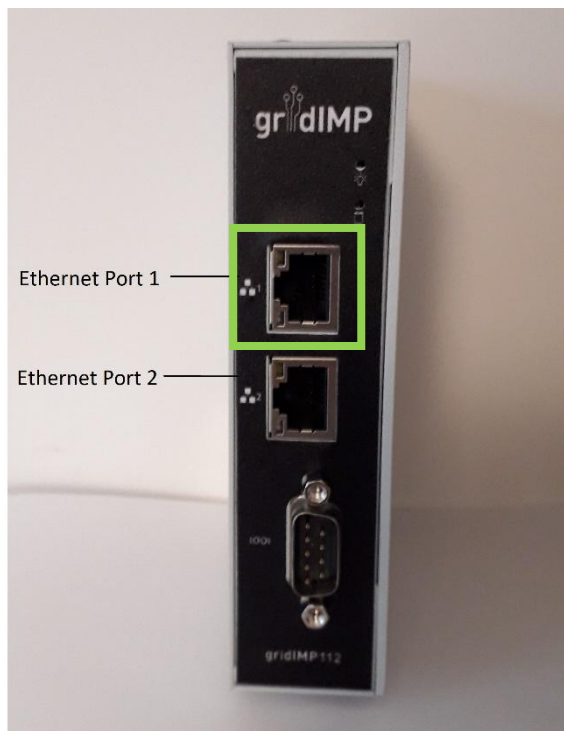
STEP 4

Use a web browser (e.g. Google Chrome or Microsoft Edge) on your laptop to connect to the impHub Engineering Console by typing the impHub's fixed IP address into the address bar: https://192.168.1.1

> ➢ *You need to override the security exception from the web browser (screenshots 1 & 2). The security exception occurs because the appliance is addressed by IP, so it is not possible to specify a domain name certificate.*
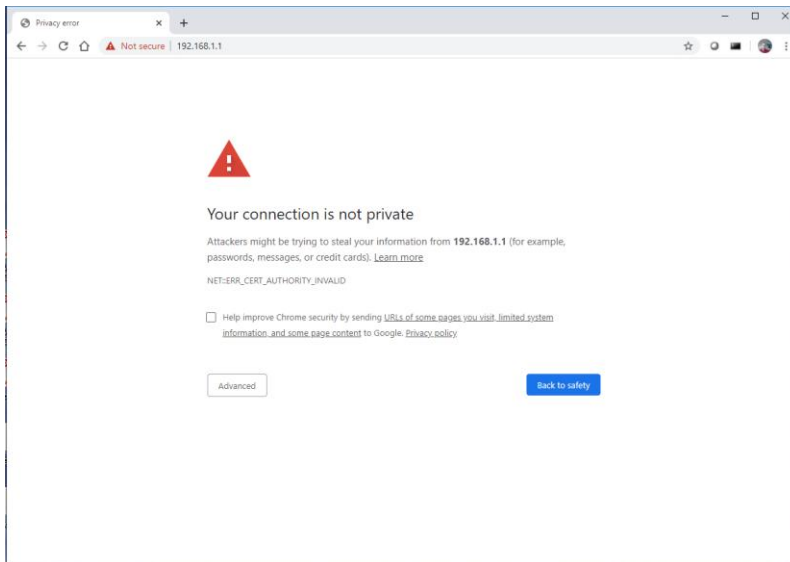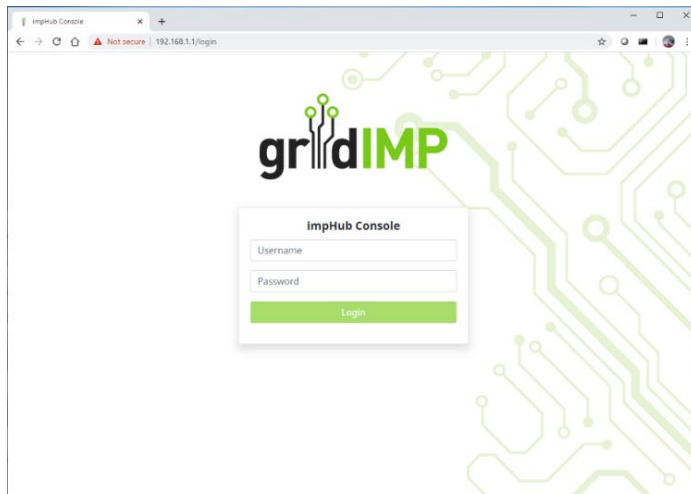

Screenshot 1 : Security Warning Part 1
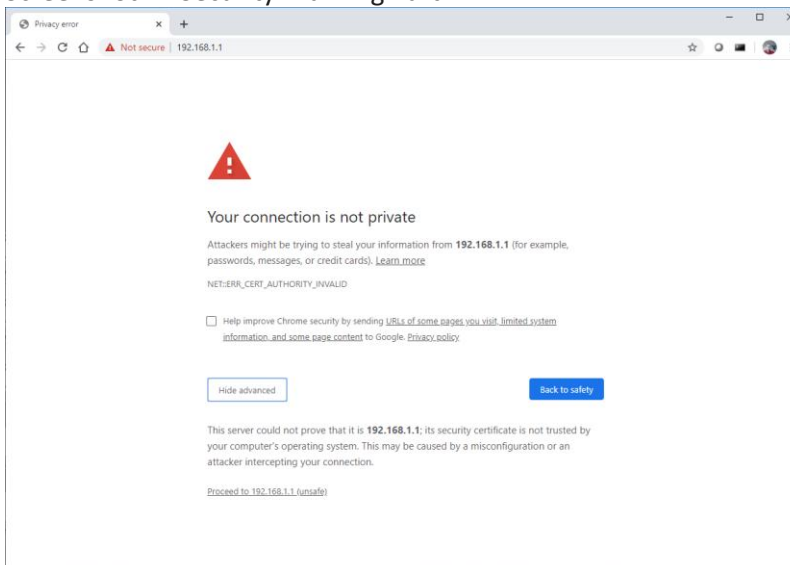
Screenshot 2: Security Warning Part 2

STEP 5

Login to the impHub Engineering Console (see screenshot 3) using the username and password printed on the side of the impHub.
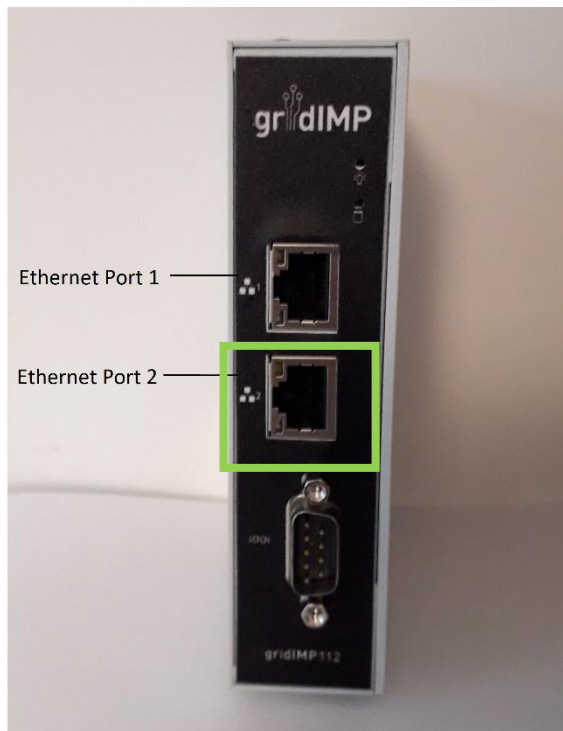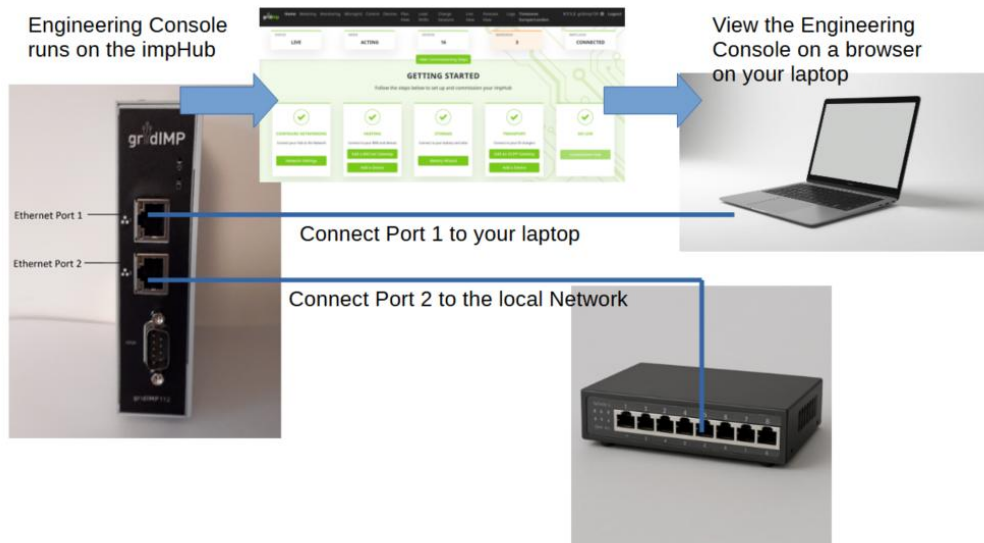
Screenshot 3: Login Page

STEP 6

Connect the impHub's ethernet port 2 (the lower port) to your local ethernet router.
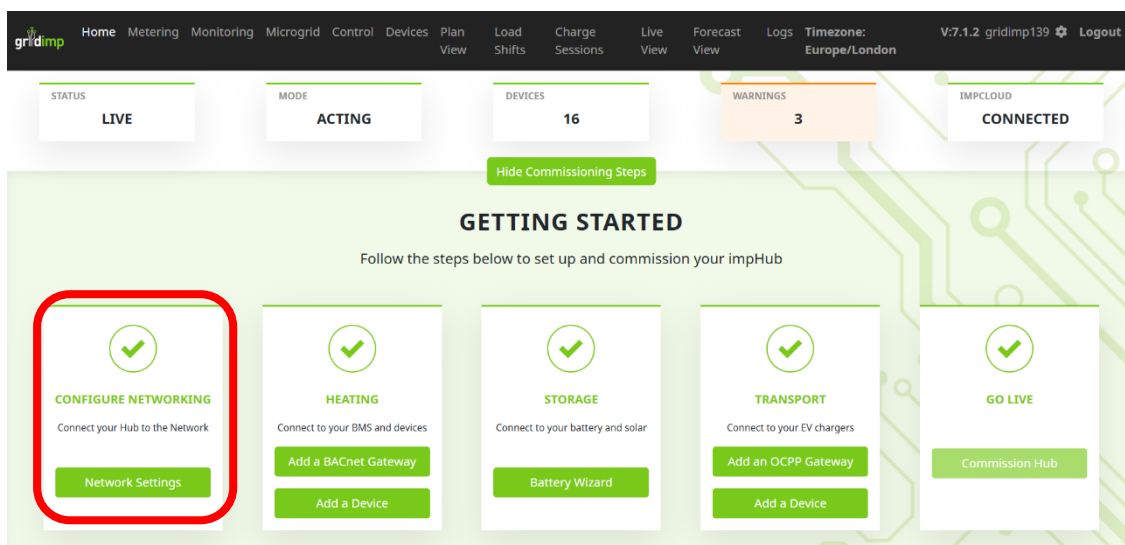
Your setup should now be as shown below, with your laptop connected to port 1 and port 2 connected to the local network.
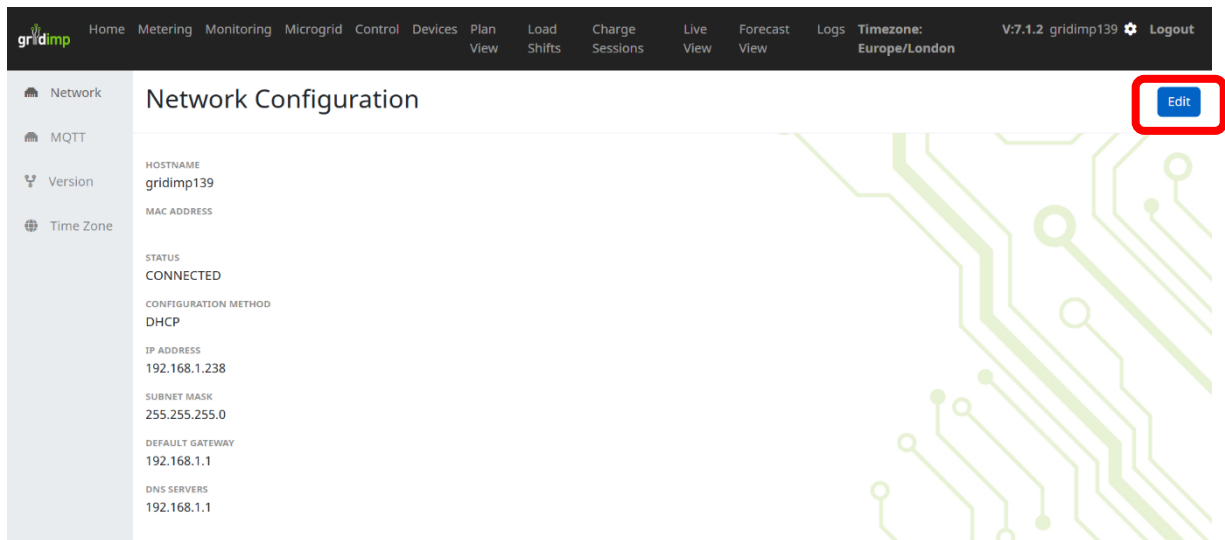

STEP 7

Using the networking details that your network engineer gave you for the impHub. Configure the IP address of the impHub's ethernet port 2 (the lower port) to either a fixed IP or DHCP. See Screenshot 4 and 5.

Screenshot 4: Home Page, Network Settings Button

Screenshot 5: Edit Network Settings Button

At the top right-hand side of the Engineering Console home page, it should now say

IMPCLOUD: CONNECTED

Congratulations, your hub is now online! You can now go ahead and configure your impHub to connect to electric heating, battery storage and electric transport loads using the links from the Getting Started section. Go to our website to download Equipment Notes (EQN) for the equipment you want to connect to:

https://www.gridimp.com/help/equipment-notes/

If this is your first installation, or the EQN you want is not yet listed, then Gridimp can support you remotely. You can book in a call with us by emailing support@gridimp.com.
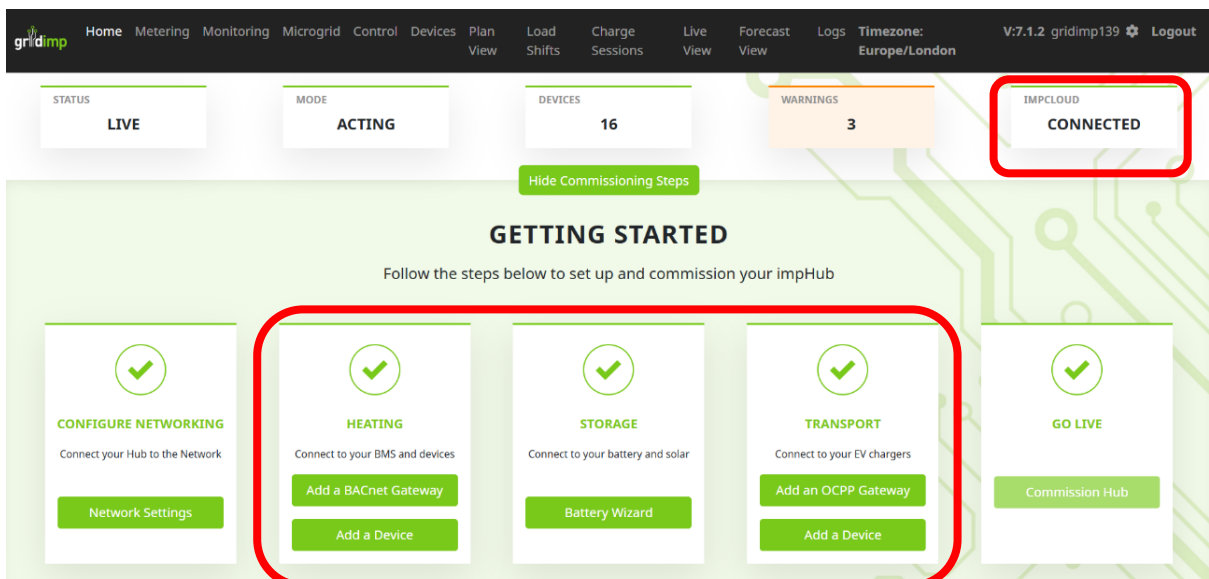
Screenshot 6: Home Page, showing impCloud Connected