Installation manual

Citygrid Gateway

DIN MKII

P/N D22006

Mounting and connections.

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1. Location

The Citygrid Gateway DIN MKII is designed for mounting on a DIN rail inside an electrical cabinet.

Note that it is recommended to place the gateway near the centre of the site to keep the communication distance short.
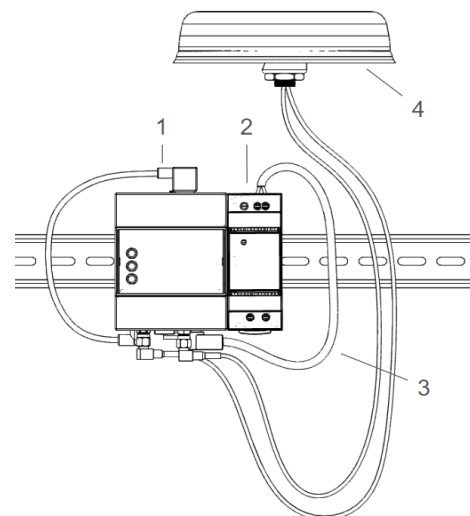
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2. Components

Included with the Citygríd Gateway DIN MKII are

1. Gateway with usb cable and dust covers
2. Power supply
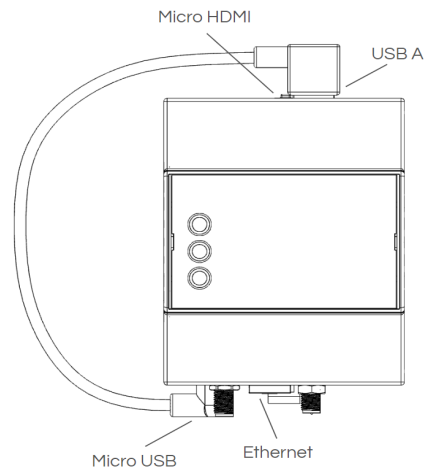3. Power cable for gateway
4. Antenna with fastening nut

The product does not include:
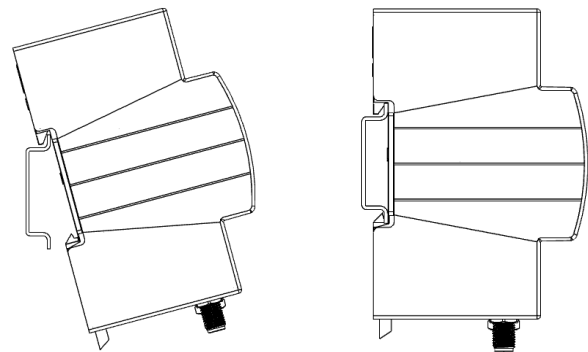
- Mains power cable for power supply

3. Preparation Gateway

- Check that the dust covers for the ethernet and micro-HDMI are in place.

- Check that the USB cable between the USB-A connector and the micro-USB is connected.

3. Mounting the Gateway and Power supply

- Position the Gateway/power supply backside up against the DIN rail.

- Tilt the Gateway/power supply and place the top groove over the top rail.

- Push the gateway/power bottom (tilt back into vertical position) until it clicks.

- To remove, pull down on the latch on the bottom back part and tilt up.

4. Preparation Power supply

- Position the power supply on the gateways right side.
- Connect the gateway power cable to the power supply output (3 and 4). Pay attention to the polarities.

- Find a suitable cable (AWG 24-12) for mains input in an appropriate length.

- Connect the mains power cable to the power supply input (1 and 2).

| PIN	
1	AC (N)
2	AC (L)
3	+V (Brown)
4	- V (Blue)
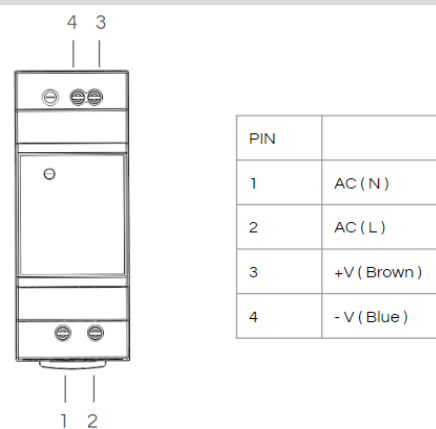
5. Mounting the Antenna

- Note! The antenna should be installed on a flat horizontal surface on the outside of the electrical cabinet.

- Drill a hole in the electrical cabinet horizontal surface minimum 75 mm from the cabinet edge size 15 x 15 mm or Ø19.5 mm.

- Insert the cables and antenna stud into the mounting hole. Make sure the rubber ring on the antenna edge isn't damaged or mounted crookedly.

- Fasten the antenna with the M14 nut to maximum 6 Nm.

Mounting hole

Ø19.5

15 mm

Antenna

Cabinet

Nut
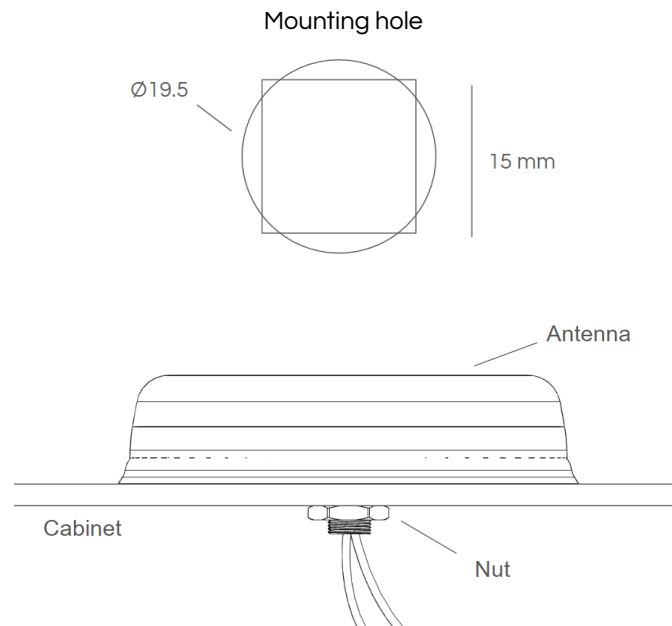
6. Connecting

1. Connect antenna connectors to the Gateway. Beware that the two antenna connectors have different polarities..

2. Connect the power supply to the Gateway.

3. Connect the power supply to mains.

4. Turn on the power to the gateway.

   How the gateway and power supply are arranged relative to each other and how the cables are routed are up to the installer. A general recommendation is to have the antenna cables routed as far away from mains power cables.

1

2

3
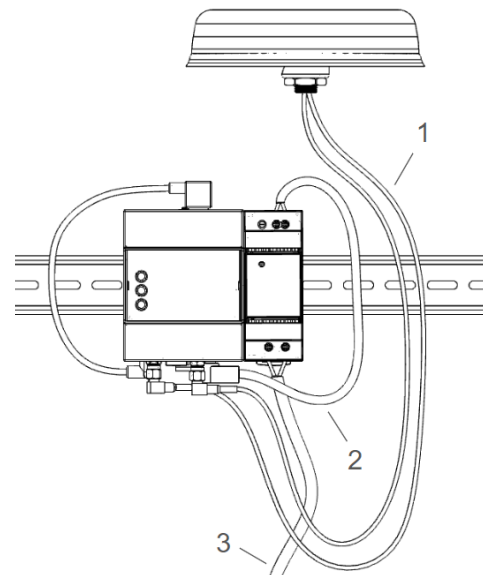
7. LED indication

LED	Status	Indication
Power	Powered	LED ON
	Not powered	LED OFF
Mobile connection	Connected	LED flash every 3 second
	Not connected	LED flash every second
Mesh network condition	Connected	LED ON
	Not connected	LED Flashes
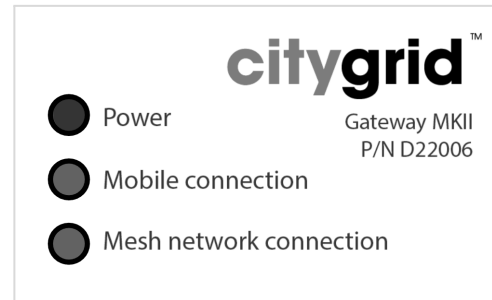
Check the Gateway status on the front panel.

- Is the Gateway powered? *LED ON*
- Is the Gateway connected to the mobile network? *LED flash every 3 seconds*.
- Is the Gateway connected to the mesh network? *LED ON (Dependent of Citygrid controllers are powered on and in range of the gateway.)*

If the answer is yes to the above, the gateway has been installed successfully.

Note: Establishing the mobile connections for the first time can take several minutes.
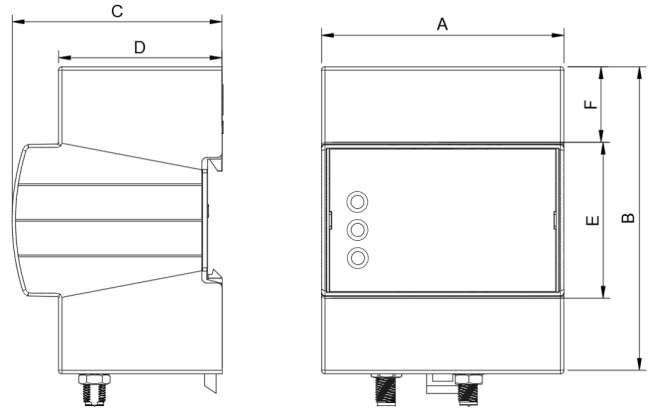
8. Commissioning to site

Commission the gateway to a site by using the Citygrid App from Google Play.

The App manual is found on www.citygrid.eu/resources.
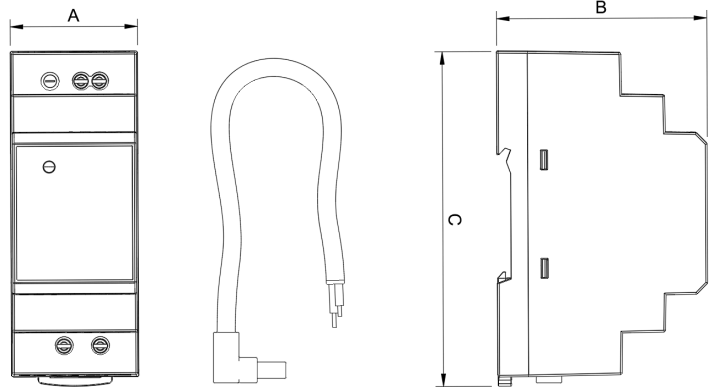
9. Dimensions and weight

Gateway

A	72 / 4M	mm / modules
B	90.5	mm
C	61	mm
D	48,5	mm
E	45	mm
F	23	mm
Weight	145	g

Power supply

A	35 /2M	mm/modules
B	58.0	mm
C	92.0	mm
Cable	300	mm
Weight	138	g

Antenna
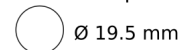
A	146	mm
B	31,5	mm
Cable	1500	mm
Weight	523	g

M14
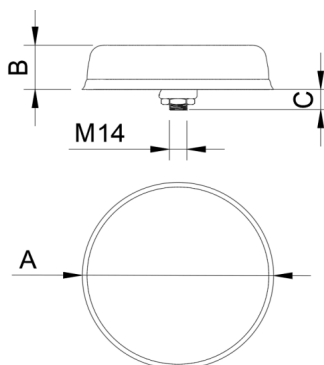
Note that the cables exiting the antenna through the hollow bolt is not included.

Hole size options

Ø 19.5 mm

15 mm x 15 mm

10. Electrical connections

Power connector	DC-jack (DC5V)
Mobile antenna connector	SMA-female
Mesh network antenna connector	RP-SMA female
Micro-HDMI	Not in use
USB-A	Connected to Micro-USB
Ethernet RJ45	Not in use

11. Connections diagram Gateway

SMA connector
RP-SMA connector
Power 5 V
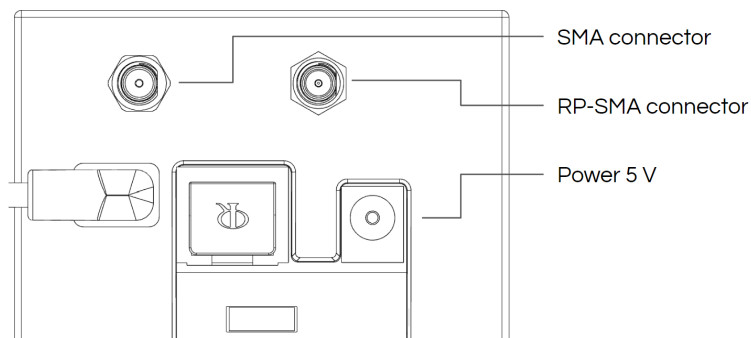
CAUTION

Avoid touching live parts.
Do not use the product with damaged housing or connectors.
Do not service when powered.
The product should be installed by a trained or qualified person.