

CGc LTE Box

M-Bus Metering Gateway with an LTE Router included



INTRODUCTION

The CGc-Box consists of a CMe3100 and an LTE router that communicates via mobile network using a SIM card. CMe3100 is easily configured and updated via its included web interface and supports a large number of integration protocols, such as ModBus, DLMS, JSON REST, FTP and HTTP, which makes the product useful in many different types of measurement projects.

Important

In order for the CGc-box to keep its protection class, make sure not to drill any new holes in the enclosure.

POWER SUPPLY

The installation should be handled by a qualified electrician or an installer with the required knowledge.

The box is equipped with a breaker. Use a screwdriver to remove an arbitrary M20 knock-out from the bottom of the enclosure and connect a power cable from mains to the wall socket. The included cable gland is used to fixate the cable in the box.

SIM CARD

For all Elvaco gateways a standard SIM card needs to be installed in order to use the mobile network. Elvaco can provide the gateway with SIM card or the customer can use their own. Please contact sales@elvaco.se

ANTENNA

One mobile network antenna is included with the LTE router. Attach the antenna to the SMA connector on the router.

Important

Make sure that antenna is not placed inside any metallic objects or the M-Bus 2-wire.

SETTING UP THE LTE ROUTER

Log in on the LTE router web interface

By logging in on the router web interface, the settings of the router can be configured. Use a network cable to connect the router to the network port of your computer. Type in the IP address 192.168.2.1 in the address field of your web browser and log in using the following credentials:

Username: admin
Password: admin01

Change LTE router settings

The LTE router needs to be configured manually through the router web interface. Elvaco can provide the router pre-configured.

Change the APN

Go to Network -> Interfaces -> MOBIS1A1 and set Auto APN to off. Type in the APN you want to use and click on Save & Apply.

Lock the IP address

By using static IP address settings, a fixed IP address will be used for a connecting device, for example an M-Bus Gateway. To use static IP address setting, go to Network -> LAN. Select a hostname and type the MAC address and a desired IP address for the connecting device. Click Add and then Save.

Change LTE router web interface password

To change the password used to log in on the LTE router web interface, go to System -> Administration. Type in the new password you want to use and confirm it. Click Save.

Set a port forwarding rule

In the LTE router web interface, your own port forwarding rules can be defined. Go to Network -> Firewall -> Port Forwarding. Find the New Port Forward Rule section, select a name for the rule and choose "TCP" as protocol. The selected external port will be used by the LTE router to connect to the WAN network and the selected internal port will be used by the external device to connect to the router (when connecting a metering gateway to the LTE router, port 80 is normally used as internal port). Type the IP address of the connecting device. Click Add and then Save.

SETTING UP M-BUS METERING GATEWAY

See quick manual of CMe3100. Go to www.elvaco.se.

TECHNICAL SPECIFICATIONS

Mechanics

Protection class	IP65
Mounting	Wall-mount

Electrical connections

Supply voltage	From mains
----------------	------------

Electrical characteristics

Nominal voltage	100-240 VAC (+/- 10%)
Frequency	50/60 Hz
Power consumption	<7 W

ORDERING INFORMATION

Part number	Description
1100422	CGc LTE 1x8 M-Bus CM-Box 14
1100423	CGc LTE 1x32 M-Bus CM-Box 14
1100437	CGc LTE 1x32 M-Bus CM-Box 14 (with CMeX10S)
1100424	CGc LTE 1x64 M-Bus CM-Box 14 (with CMeX11S)
1100425	CGc LTE 1x128 M-Bus CM-Box 14 (with CMeX12S)
1100426	CGc LTE 1x256 M-Bus CM-Box 14 (with CMeX13S)
1100474	CGc LTE 1x512 M-Bus CM-Box 14 (with 2*CMeX13S)
1100319	CGc LTE 1x8 Enhanced WM-Bus and LTE router (868MHz)
1100465	CGc LTE 1x8 Enhanced WM-Bus and LTE router (434MHz)
1100427	CGc LTE StreamMode Amplified WM-Bus CM-Box 14 (868MHz)
1100428	CGc LTE StreamMode Amplified WM-Bus CM-Box 14 (434MHz)

ACCESSORIES

Part number	Description
9950735	Omni antenna 5 dB 145 cm 433 MHz
9950472	Omni antenna 5 dB 868 MHz
9950500	Omni antenna 0 dB 868 MHz

SAFETY

The warranty does not cover damage to the product caused by usage in any other way than described in this manual. Elvaco AB can not be liable for any personal injury or property damage caused by usage in any other way than in this manual.

CONTACT INFORMATION

Elvaco AB Technical support:

E-mail: support@elvaco.com
Online: www.elvaco.com