LTE router in A-Box

INTRODUCTION

The LTE router is used to enable a connecting device (for example Elvaco's CMe3100 M-Bus Metering Gateway) to transmit data over the mobile network. It is mounted and connected in a protecting enclosure and ready to plug in and start using at delivery.

The LTE box-build can be ordered as a stand-alone alternative or together with one of Elvacos CGc-Boxes. For more information about our available solution setups, please visit the Elvaco website, http://www.elvaco.com.

MOUNTING

The box is mounted on a wall by using the holes in its top and bottom corners. Use a screw with a head diameter of no more than 8 mm and a screw driver with a minimum length of 65 mm.

MPORTANT

In order for the box-build to keep protection class IP66, 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 power needs to be connected via a clearly marked and easily accessable switch to make sure the device can be switched of during service work.

The box is equipped with a wall socket. 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. When the wiring is completed, connect the LTE router power supply to the wall socket and connect the power cable to the router.

SIM CARD

The LTE router needs a SIM card in order to use the mobile network. For all Elvaco LTE box-builds, a SIM card will be installed in the LTE router on delivery. Information about the SIM card identity and its phone number can be found on the printed label, packed inside the box.

ANTENNA

Two mobile network antennas are included with the LTE router. Attach them to the SMA connectors on top of the enclosure

IMPORTANT

 Make sure that antennas are not placed close to any metallic objects or the M-Bus 2-wire.

NETWORK

The included 3 meter network cable is used to connect the LTE-router to the device that is to access the mobile network. Use a screw driver to remove an arbitrary M20 kockout from the bottom of the enclosure and connect the network cable to the LAN 1 port of the LTE router and to the other device. If using the LTE router with one of Elvaco's CGc-Boxes, the network cable should be connected to the CMe3100 Ethernet connector. Use the included cable gland to fixate the cable in the box.

LOG IN ON THE LTE ROUTER WEB INTERFACE

By logging in on the LTE 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 192.168.1.1 in the address field of your web browser and log in using the following credentials:

Username: admin Password: admin01

CHANGE LTE ROUTER SETTINGS

When ordering the LTE-router together with a CGc IP Box, the LTE router settings will be configured at delivery. However, when purchasing the LTE router separately, settings will have to be configured manually through the LTE router web interface. Below, some common configuration options is described.

English

Change the APN

Go to Network -> Mobile and select a SIM card. Type in the APN you want to use and click on **Save**.

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 adress 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**.

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 CMe3100 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.

TECHNICAL SPECIFICATIONS

Mechanics

Protection class	IP66
Mounting	Wall-mount
SIM card	Slide, standard size

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
1100247	LTE router in A-Box 15
1100248	CGc IP 1x8 M-Bus in CM-Box 12 and LTE router in A-Box 15
1100249	CGc IP 1x32 M-Bus in CM-Box 12 and LTE router in A-Box 15
1100250	CGc IP 1x64 M-Bus in CM-Box 12 and LTE router in A-Box 15
1100251	CGc IP 1x128 M-Bus in CM-Box 12 and LTE router in A-Box 15
1100252	CGc IP 1x256 M-Bus in CM-Box 12 and LTE router in A-Box 15
1100253	CGc IP 1x8 Amplified Wireless M-Bus in CM-Box 12 and LTE router in A-Box 15
1100254	CGc IP 1x8 Wireless M-Bus in CM-Box 12 and LTE router in A-Box 15

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 personal injury or property damage caused by usage in any other way than described in this manual.

CONTACT INFORMATION

Elvaco AB Technical support:

Phone: +46 300 434300 E-mail: support @elvaco.com Online: www.elvaco.com