

1 Introduction



► This installation manual contains important information regarding the installation of the eTactica Gateway model EG-200, which must be followed.

- Read the entire manual before beginning the installation in order to avoid making mistakes and to reduce the chances of any danger during the installation process.
- Pay attention to the installation instructions and be prepared to look them up during the installation process.

2 Safety Information

This manual contains information which you must observe for your own personal safety and the prevention of injury or damage. Such information is highlighted by the warning triangle shown below.

2.1 Hazard Classification

DANGER

This warning indicates danger with high risk, which if not avoided, can lead to death or serious injuries.

WARNING

This warning indicates danger with medium risk, which if not avoided, can lead to serious or major injuries.

CAREFUL

This warning indicates a lower risk, which if not avoided, can lead to minor or major injuries.

ATTENTION

This warning indicates that there is important information regarding the product or its parts requiring particular attention.

2.2 Installation Information

WARNING

- **Be sure to observe all hazard statements and warnings and cautions.**
- **Read the section entitled “Safety Information” very carefully.**

2.3 Safety Notes

DANGER

Risk of lethal electric shock.

Only low voltage current is present in the connection between the Gateway and slave devices.

- Install the Gateway only in approved cabinets or housings so that all connections are appropriately covered and protected.
- To restrict access by unauthorized persons, the electrical cabinet should be locked. Turn the power off before installation or maintenance, and provide protection against unintentional power-up during work.
- Install the Gateway in a dry environment.
- Protect the Gateway from humidity and moisture.

WARNING

- Always install data and power cables so that they are separated (Refer to DIN EN 50174-2).

ATTENTION

- To prevent damage caused by a power surge, the Gateway should be protected by a surge arrester (SPD Type 1) and surge protector (SPD Type 2) upstream of the power source.
- Make sure that the power source which supplies the Gateway with voltage can be switched off easily, for example via a C2 or B6 miniature circuit breaker. This must be marked as the disconnecting device for the power source and be easily accessible.
- No maintenance on the Gateway is required.

3 Target Group

The activities described in this document may only be carried out by a certified electrician with the following qualifications:

- Training in the installation and commissioning of electrical equipment.
- Safety regulations training in electrical hazards and safety.
- Knowledge of relevant standards and guidelines.

4 Description

The EG-200 gateway is a Modbus RTU master, collecting data from eTactica or 3rd party Modbus devices. Data can be aggregated and transformed and sent to multiple local or cloud data services, via Ethernet or WiFi. Also operates as a Modbus TCP to RTU bridge for use with 3rd party management systems.

- DIN rail mounted, compact 2 units.
- Data storage via microSD.
- Open SDK and APIs for building your own applications
- Built in webserver for device configuration and live data

5 Intended Use

The Gateway must only be used when installed in an appropriately protected cabinet, in a dry, indoor space. Install the Gateway according to the instructions in this manual. Other uses or installation methods may lead to personal injury or damage to property. This includes any modifications to the Gateway, unless specifically authorized by eTactica ehf. Any other use of the product aside from its intended use, as described in this manual, is deemed to be improper. Unauthorized alterations, modifications, repairs, or opening of the product casing will void the warranty and are prohibited. This manual is a part of the product and must be read, followed, and kept accessible at all times.

6 Disposal

The Gateway must not be placed in regular waste disposal.



- Dispose of the Gateway in accordance with your local regulations on electronic waste.

7 Contact Information

In case of any technical problems with this product, please contact eTactica ehf at:

eTactica ehf
Borgartun 27
105 Reykjavik
Iceland

Tel.: +354 535 3000
Internet: <http://www.etactica.com>
Email: support@etactica.com

8 What is in the box

Designation	Article no.	Quantity
EG-200	5060474160070	1
Device bus connector	82235424318	1
Power connector	OSTTJ027150	1
Antenna		1
Terminating resistor 120 Ohm 1/4W	A105981CT-ND	1
Installation Manual		1

9 Product Diagram

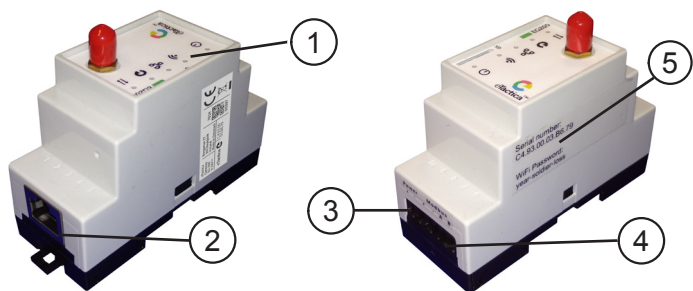


Fig. 1 EG-200

1	Status LEDs
2	Ethernet connector
3	Power connector
4	Device bus connector
5	Serial number and Wi-Fi password

10 Technical Data

Electrical Connections	
Supply voltage	9-24 V DC
Supply power	Max. 13 W
Network Communication	Ethernet TCP/IP (10/100Mbit) Wi-Fi (802.11b/g/n)
Device bus	
RS485-cable length	Max. 60 m
Interface protocol	Modbus/RTU- 19200, 8, E, 1 (default settings) (9600-115200 available)
Modbus cable	4-wire, 2× twisted pair, multi-stranded
General data	
External memory	Micro SD-card slot
Protection rating	IP2X
Temperature	
— Storage	-25 °C to 70 °C
— Operating	-0 °C to 55 °C
Relative humidity	50 % to 90 %
Altitude	<2000m
Pollution degree	2

11 Installation

DANGER

Risk of lethal electrical shock

- ▶ Turn power off before commencing the installation or maintenance work and provide protection against unintentional power-up during work.

11.1 Installation Information

To install the Gateway you will need the following:

- ▶ An insulated screwdriver
- ▶ Device cable, premade cables are available from eTactica, otherwise make it on site
- ▶ Power supply
- ▶ Ethernet or Wi-Fi connection

11.2 Connecting the Gateway to Modbus Devices

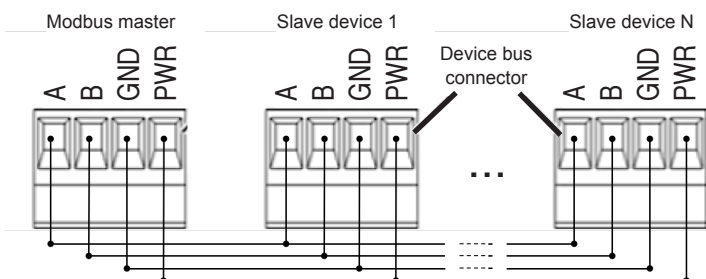


Fig. 2 Wiring the Gateway to device slaves

- ▶ As a standard RS-485 network, all devices should be daisy chained (no branches, no loops) with the Gateway at one end. Modular premade cables comprising a “head” piece for the Gateway, multiple “Y” pieces for intermediate devices and a “tail” piece with built in 120 Ohm termination are available separately from eTactica which can make this process plug and play.
- ▶ Alternatively, refer to figure 2 for terminal assignments.
- ▶ While connecting devices, record the serial number of each device, and the names/purpose of each measured channel. This will enable you to assign a useful cabinet model and share this information with your chosen software platforms.
- ▶ Connect the cable to the Gateway (pos. 4 in Fig. 1).

11.3 Connecting Power and Network Cable






- ▶ Connect an Ethernet cable to the connector (pos. 2 in Fig. 1) and connect the other end of the cable to an Internet router/modem.
- ▶ Connect the power cable to the Gateway (pos. 3 in Fig. 1).

11.4 Initial Configuration

- Once the Gateway has been installed continue with steps 1-4:
1. Wait for the Wi-Fi hotspot to appear on your laptop or tablet, and connect, see pos. 5 in Fig. 1 for the Wi-Fi password.
 2. In your browser, go to the URL 192.168.49.1.
 3. Follow the configuration Wizard.
 4. The Gateway User Guide (available on www.etactica.com) has further information about setting up the Gateway.

12 LED Status Indication

The Gateway has 5 LEDs on the front, which indicate the status of the device (pos 1 in Fig. 1).

LEDs	Description
	When this light flashes, it indicates Modbus transmission
	When this light is on, the Gateway is successfully connected to a service.
	When this light is on, the Ethernet cable is connected, flashing indicates that data is being transmitted.
	When this light is on, it indicates that the Wi-Fi hotspot is ready. If it is flashing, it indicates that data is being transmitted.
	When this light is on, it indicates that the Gateway is turned on.