

Power Monitor User and Installation Manual

**This user and Installation manual describes how to use
and install the charging station. You must carefully
read the safety information before you start.**

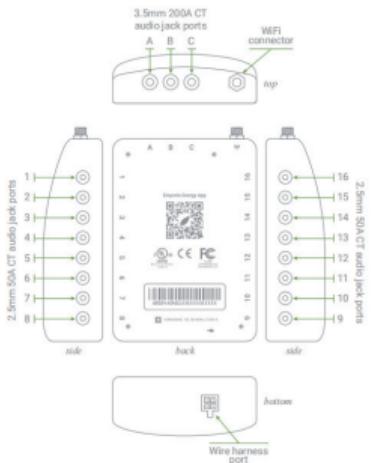
Contents

1. Overview	.....	1
Packing list	.....	1
Connectors	.....	2
System wiring diagram	.....	2
2. Technical specification	.....	3
3. Safety information	.....	3
4. Installation	.....	4
Mounting	.....	4
Wiring	.....	4
5. Status light indicator	.....	5
6. Configuration	.....	5

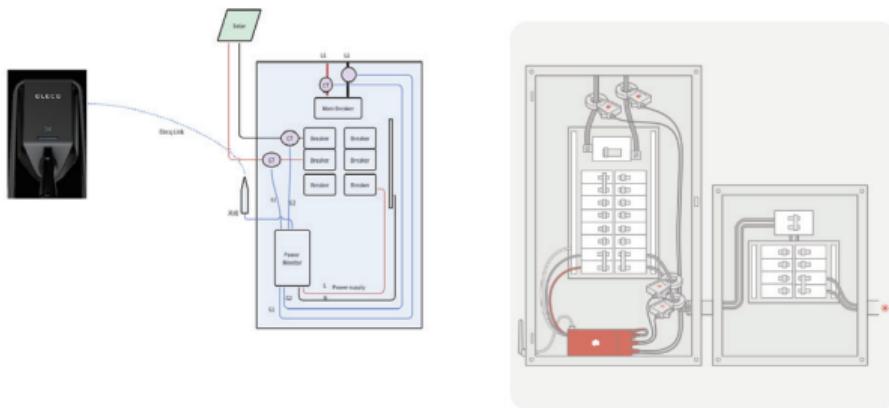
1. Overview

Packing list		
Power Monitor	 -	Power cable
Antenna assembly		Phoenix terminals*3
200A CTs*2		DIN rail
100A CTs*2 (optional for solar)		Quick start guide

Connectors



System wiring diagram



2. Technical specification

General	
Supply	90-264V AC
Power consumption	1.5W
Dimension	
Weight	
Operating temperature	-40~55°C
Storage temperature	-40~85°C
Connectivity	
Elecq Link	
RS485	
Sensor port * 6 (For CT or Rogowski Coil)	
Protection	
Degree of protection	NEMA Type 2
Ovvovoltage category	III
Protection class	II
Surge protection level	4kV/2kA

3. Safety information

Note

Please read the safety instructions carefully before installing and operating the Power Monitor

1. Installation of this product is restricted to certified electricians. Ensure compliance with national and regional regulations during the installation process.
2. Before and during installation, make sure to switch off the power and electricity. Activate the power only after the entire installation has been completed by a qualified electrician.
3. Please carefully follow this manual. Do not use the Power Monitor in any manner other than specified in this installation guide. Incorrect installation and use may lead to injury.
4. Inspect the product for any obvious damage before use. If you believe any of the components may have been damaged, do not attempt to use them.
5. Please ensure all connections are secure before use, and do not attempt to repair or use the product if damaged.
6. Avoid installing the product in environments with explosive gas or vapors; nor in damp or wet environments;
7. This is a power monitoring device; use only for its intended purpose.
8. DO NOT allow individuals (including children) with reduced physical, sensory, or mental capabilities, or those lacking experience and knowledge, to use electrical devices unsupervised.
9. After the product is installed inside the distribution box and powered on, do not touch the AC input section.

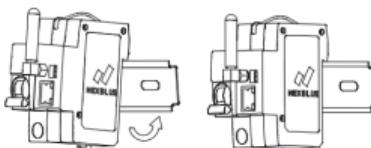
4. Installation

Mounting

Mount the Power Monitor on the DIN rail inside the fuse cabinet. If that's not possible, attach the included DIN bracket to a surface and then mount the Power Monitor.

Note. If there is not enough space for DIN rail in your electrical panel, Find a suitable location to place the Power Monitor and ensure that its usage environment meets electrical requirements.

- Mount NexBlue Zen (Current Sensor) on the DIN rail



Wiring

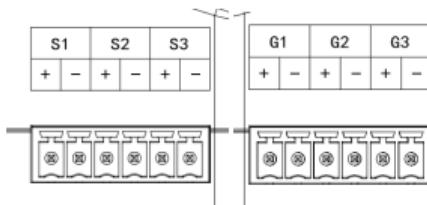
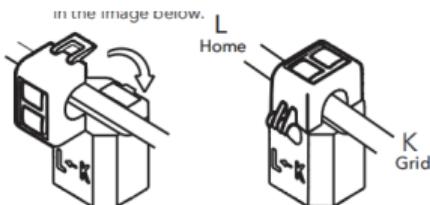
1. Install the CT clamps

Clamp the current sensor around the phase line. Match the clamps with the corresponding phase, ensure the clamps are in the direction of current flow.

Note. The 200A CT clamps are used for grid current measuring, and the 100A CT clamps are used for solar.

Connect the pins of CT clamps to the right port of Power Monitor. You can refer to the silk screen on the device and the line sequence instructions in the picture below.

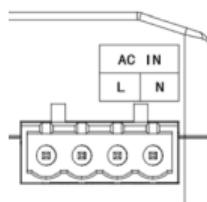
The Port S1/S2/S3 means L1/L2/L3 for solar, G1/G2/G3 means L1/L2/L3 for grid. L3 CT clamps shall NOT be used under US single/split phase grid conditions.



2. Power supply wiring

Power Monitor must always be protected by a proper circuit breaker, you can use the circuit breaker in your electrical panel if it is approved by your electrician based on local regulatory requirements.

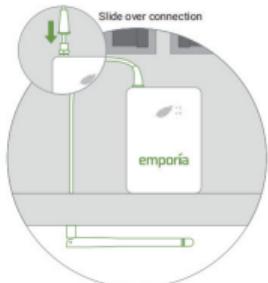
The power cable already comes with phoenix terminals. You can connect the red wire to the L terminal, and connect the black wire to the Neutral line. And then connect the power cable to the power supply port.



3. Mount the antenna

Screw the antenna assembly cable onto the terminals on the top of the power monitor. Feed the antenna through the hole on the electrical panel.

Note. It's ok to install the antenna inside of a wall.



4. RS485

We strongly recommend using wireless communication to use the Power Monitoe. If you need to use RS485, you connect the communication wire according to the terminal silk screen.

Note. As RS485 and Elecq Link are both available on the Power Monitor, you can only choose one of them for configuration.

5. Status light indicator

No.	Status	Light mode
1	Powered up, standby	Solid Cyan
2	RS485 connected	Solid Blue
3	RS485 not connected	Blinking Blue
4	Elecq Link connected	Solid Green
5	Elecq Link disconnected	Blinking Green
6	Warning	Solid yellow
7	Error	Solid Red

6. Configuration

Download the Elecq Partner app and follow the instructions to add the product to an existing location or a new location.

The Elecq Partner app is available on the App Store and Google Play.



FCC regulatory conformance:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IC regulatory conformance

This device complies with CAN ICES-003 (B)/NMB-003(B).

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la norme CAN ICES-003 (B)/NMB-003 (B).

Cet appareil contient des émetteurs / récepteurs exempt (s) de licence qui sont conformes aux RSS exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes:

- (1) Cet appareil ne doit pas provoquer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

The device is restricted to indoor use when operated in the Canada using frequency 5150MHz-5250MHz to reduce the potential for interference.

Lors de l'utilisation au Canada d'un appareil dont la fréquence est de 5150 MHz à 5250 MHz, l'appareil est limité à un usage intérieur afin de réduire les risques de brouillage.

RF Exposure

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d' exposition aux rayonnements de la IC établies pour unenvironnement non contrôlé. Cet équipement doit être installé et fonctionner à au moins 20cm de distance d' un radiateur ou de votre corps. Cet émetteur ne doit pas être co-localisé ni fonctionner en conjonction avec une autre antenne ou un autre émetteur.