



Genion One MC

Genion One MC, Home manager for EV charging with self-supply

Code: V40702.

- > Protocol: Modbus RTU
- > Clamp: 3 MC1-20-50/100/150A
- > Communications: RS-485 | Ethernet | Wi-Fi

Description

Energy flow manager for home installations with electric vehicle chargers and self-supply. Compatible with every single-phase eHome Solar models and with any solar inverter on the market. **Genion One** automatically manages the net hourly metering, feeding its energy into the grid when it is not generating enough and subsequently consuming this electricity.

It includes a web application to monitor and control the installation via Wi-Fi from any mobile device. Thanks to the installation wizard, you can automatically set up the number of electrical vehicle chargers and current transformers in the home.

Genion One has 3 modes of electricity flow management:

- Just Green: Charges the electric vehicle at no cost using only excess solar power.
- Smart Mix: Charges intelligently based on the configurations defined for each time period.
- Boost: Charges at 100% of the available power regardless of the programmed schedule.

Application

Genion One focuses on home use, making it the ideal complement for our eHome Solar. It is also easy to install and start up.

This product is specially designed for installations with self-supply systems and home charging points.



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Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	4,5 ... 6,5 VA
Frequency	47 ... 63 Hz
Nominal voltage	90 ... 264 V~

Mechanical characteristics

Size (mm) width x height x depth	105 x 89 x 49.5 (mm)
Envelope	Polycarbonate UL94 - Self-extinguishing V0
Fastening	DIN rail
Weight (kg)	0,15

Environmental characteristics

Protection class	IP 20
Relative humidity (without condensation)	5...95 %
Storage temperature	-25...+75 °C
Working temperature	-10...+50 °C

Current measurement circuit

Installation category	CAT III 300 V
Nominal current (In)	... / 250 mA
Phase current measuring range	2...120 % In
Maximum pulse current	3 x In A
Minimum current measurement	1 % In

Voltage measurement circuit

Installation category	CAT III 300 V
Input impedance	1 MΩ
Voltage measuring range	5 ... 120 % Un
Nominal voltage	230 V ~ (Ph-N) / 480 V ~ (Ph-Ph)

Communication Network

Technology / Type	Ethernet 10/100 Base TX (TCP/IP)
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Standards

Electrical safety, Maximum height (m)	2000
Electrical safety, Installation category	CAT III 300 V
Standards	UNE-EN 61010-1, UNE-EN 61010-2-30, UNE-EN 60068-2-1, UNE-EN 60068-2-2, UNE-EN 60068-2-78, UNE-EN IEC 61326-1



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Electrical safety

Insulation	Double-insulated electric shock protection class II (IEC 61010)
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User interface

LED	4
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Memory

Type	PSRAM (8 MB) & SPI Flash (16 MB)
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Measurement accuracy

Active energy measurement (kWh)	Class 1
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Serial communication

Protocol	Modbus /RTU
Technology / Type	RS-485

Wireless communication

Band	2,4 GHz
Technology / Type	Wi-Fi

Genion One

Home manager for EV recharging

CODE	TYPE	Clamp	Communications	Protocol
V40702.	Genion One MC	3 MC1-20-50/100/150A	RS-485 Ethernet Wi-Fi	Modbus RTU

Genion One is compatible with the eHOME Solar range. It includes a web app for dynamically managing the photovoltaic generation and the charging point. It can also manage up to two eHOME Solar devices.

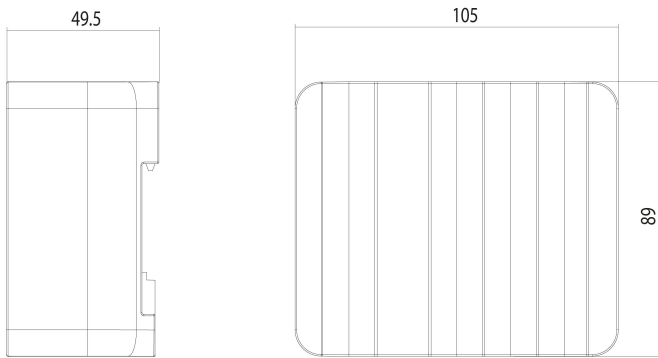


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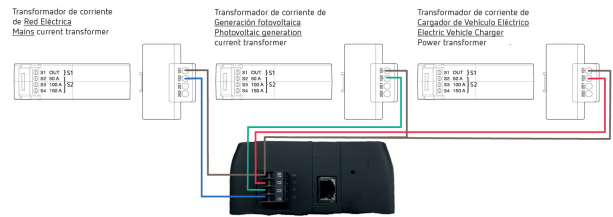
Dimensions



Connections

Esquema eléctrico de conexión Genion One MC (con transformadores MC1)
Wiring diagram Genion One MC (with MC1 transformers)

Conexión de Genion One y transformadores MC1 en los terminales del esquema. Los transformadores incluidos en el kit Genion One MC son transformadores eficientes monofásicos con triple escala (50/100/150 A), por tanto, podrá escoger la escala que más le convenga.
Connection of Genion One and MC1 transformers on the terminals of schematic. The transformers included in the Genion One MC kit are efficient single-phase transformers with triple scale (50/100/150 A), so you can choose the scale that suits you best.



Nota: La conexión que se muestra en este esquema utiliza una relación de transformación de escala 50 A, por lo tanto, este es el valor que deberá indicarse en los parámetros de configuración.
Accediendo a la página Web con el perfil Instalador se visualiza el apartado Instalación que permite configurar todos los parámetros de instalación del Genion One a partir del asistente.

Note: The connection shown in this diagram uses a 50 A scale transformation ratio, therefore, this is the value to be indicated in the configuration parameters. Accessing the web page with the Installer profile displays the Installation section, which allows you to configure all the Genion One installation parameters using the wizard.

Conexión de Modbus RS-485 Genion One a eHome Solar
RS-485 Genion One to eHome Solar connection

Realice la conexión de datos Modbus para Genion One y eHome Solar (también eHome Link) en los terminales que se muestran.
Make the Modbus data connection for Genion One and eHome Solar (also eHome Link) on the terminals shown in the following pictures

