

Green'Up webserver Manager for Green'up Premium and Control charging stations (100-charging stations)

Cat.No: 0 590 99



SOMMAIRE

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1. DESCRIPTION - USE

The Legrand Green'up webserver is a platform for managing and monitoring Green'up Premium and Control charging stations for electric vehicles.

Designed to manage a network of up to 100 Green'up Premium and Control charging stations via the OCPP protocol. The webserver interacts with a measuring station via Modbus over IP protocol to manage loads on the system through a proprietary algorithm called DLM (Dynamic Load Management). It offers a range of features that allow Charge Point Operators (CPO) to optimize the use of charging infrastructure, monitor the status of stations in real-time, and manage energy transactions. It is possible to fix the webserver in a rack cabinet or on the bottom of a cabinet or panel board with a DIN rail using accessories and screws.

Main Features:

- Interactive Dashboard: Graphical visualization of charging stations, charging stations, and system current absorption.
- Tag Management: Creation, modification, and deletion of tags for authorization and management of charging stations.
- Charging Station Configuration: Automatic detection, addition, modification, and remote management of stations.
- Dynamic Load Management (DLM): Dynamic load management to optimize energy use.
- OCPP Configuration: Configuration for local mode and gateway for communication with charging stations.
- Backup and Restore: Backup and restore functionality to ensure data security.

Use Cases:

- Local Mode: Charging network managed locally by the Legrand Green'up webserver. Ideal for managing a network of up to 100 Green'up Premium and Control charging stations via the OCPP protocol.
- Gateway Mode: Charging network managed by an external CPO. The webserver acts as a gateway between the stations and the CPO, allowing supervision of the system's status.
- Hybrid System: Part of the stations managed locally by the webserver and part managed by an external CPO, offering flexibility and optimal control.

2. TECHNICAL CHARACTERISTICS

2.1 Electrical characteristics

Auxiliary supply:

9 Vdc – 36Vdc by external power supply (power adapter supplied with the webserver).

Real Time Clock battery: 3 V/210 mAh

Pollution degree: 2

Vibrations during operation:

3G rms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis

Shocks during operation:

30G rms, IEC 60068-2-27, half sine, 11ms duration

Consumption:

- Typical 5,5 W
- Max 10,2 W

IT security:

Server web pages use HTTPS with SSL and 256-bit cryptography (AES 256).

2.2 Operating system

The operating system is Linux (Ubuntu / Debian) and the embedded application on the webserver is written in Java.

Technical characteristics of communication:

- Ethernet specification compliance:
Compliant with: IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3y, IEEE 802.ab.
- Interface Ethernet:
1 x 10/100/1000 Mbps Intel 82583V GbE supports "Wake on LAN" standard

2.3 Climatics characteristics

Ambient temperature:

Operating: 0 °C / + 50 °C
Storage: - 40 °C / + 85 °C

Relative humidity:

95% at 40°C (non-condensing)

2.4 Mechanical characteristics

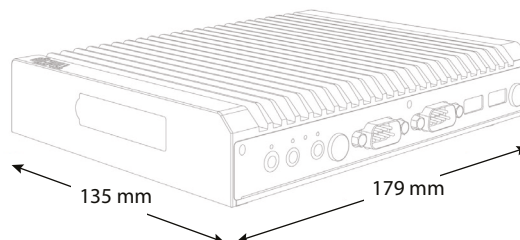
Case material: Aluminium housing

Protection Index:

Protection index against direct contacts: IP50 (IEC/EN 60529) using the included accessories.

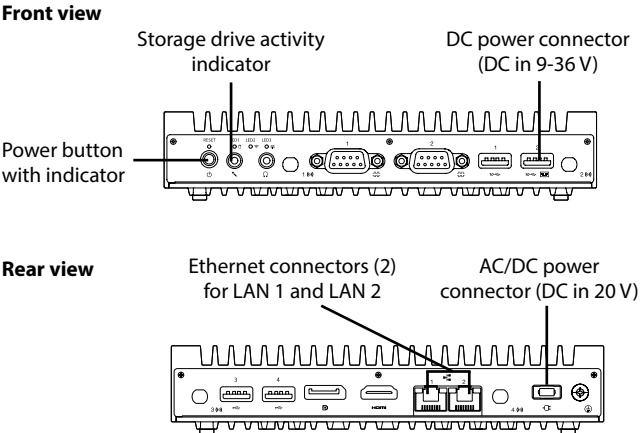
3. DIMENSIONS AND WEIGHTS

3.1 Description



Average weight per device: 0.7 kg.
Volume when packed: 7.75 dm³.

4. CONNECTION



Power button with indicator:

- Gives information about the operating state of the webserver.
- LED linked to power ON/OFF button.

To turn off the webserver, you can short press the power button until the indicator turns off.

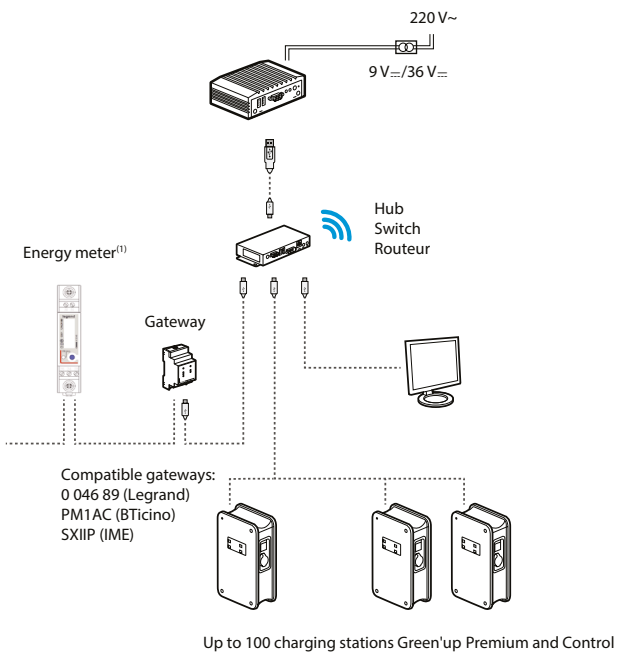
LED status	Indication
Blinking-green	The indicator is showing data transfer status.
OFF	The webserver is off or in sleep mode.

■ **4.1 Configuration**

Fixed Configuration of the Device

After the initial configuration, the standard setup of the device is an Ethernet connection from LAN1 of the device to a switch/router/hub, to which up to 100 Green'up Premium and Control charging stations and a measuring meter will be connected on the same network.

The web pages will be accessible on the network configured during the first installation.



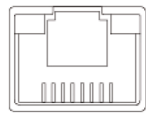
(1) Compatible Legrand Energy Meters: 4 120 68, 4 120 81, 4 120 83, 4 120 91, 4 120 93, 4 120 41, 4 120 43, 4 120 74, 4 120 75

Compatible Bticino Energy Meters: F4N200, F4N300, F4N400, F21DM63N, F41DM63N, F41TMAN, F41DM125

Compatible IME Energy Meters: Nemo D4-e, Nemo 96HD-e, Nemo D4-Le, Nemo 96HD-Le, Nemo 96HD+, Conto D1, Conto D2, Conto D2 MID, Conto D4-Pd, Conto D4-Pd MID, Conto D4-Pt, Conto D4-Pt MID, Conto D6-Pd, Conto D6-Pd MID

■ **4.2 Ethernet connectors**

Ethernet connectors are equipped with Intel I225 Ethernet controllers that support 10/100/1000/2500 Mbps. The Ethernet port provides a standard RJ 45 connector with LED indicators on left and right side.



Note: In industrial environments, it is recommended to use shielded network cables.

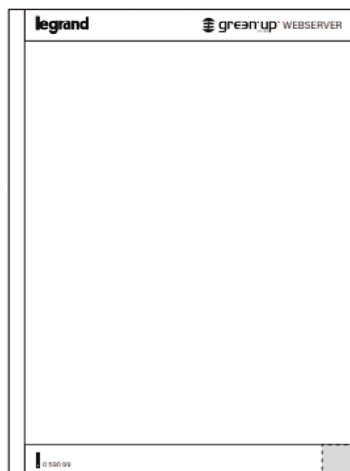
LED status	Indication
Solid yellow on the left side	The indicator is showing successful Ethernet connection.
Blinking orange on the right side	The indicator is showing data transfer status and the transfer speed is 2500 Mbps.
Blinking green on the right side	The indicator is showing data transfer status and the transfer speed is 1000 Mbps.
Solid yellow on the left side and LED off on the right side	The indicator is showing data transfer status and the transfer speed is 10/100 Mbps.

Note: all LEDs and ports not described in this document do not have any use in Legrand applications.

5. MARKING

Upper face marking:

By adhesive foil



Lower part marking:



6. COMPLIANCE AND APPROVALS

Compliance to standards:

- Compliance with Directive on electromagnetic compatibility (EMC) n° 2014/30/EU
- Compliance with low voltage directive n° 2014/35/EU.
- Compliance with: EN IEC 62311, EN IEC 62368-1, EN 61010-1, EN IEC 61010-2-201, EN 55032, EN 55035, EN IEC 61000-3-2, EN 61000-3-3, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, EN 301 489-1 V2.2.3, EN 301 489-3 V2.1.1, EN 301489-17 V3.2.4, EN IEC 63000: 2018.

Environment respect - Compliance with EU directives:

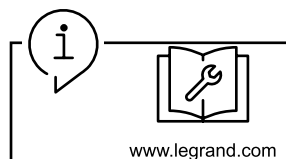
- Compliance with Directive 2011/65/EU as amended by Directive 2015/863 (RoHS 2) on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
- Compliance with REACH regulation (1907/2006): at the date of the publication of this document no element of the SVHC substance list (updated on 27/06/2018) is present in these products.
- WEEE directive (2012/19/EU): the sale of this product is subject to a contribution to eco-organisations in each country responsible for managing end-of-life products in the field of application of the European Waste Electronic and Electrical Equipment Directive.

Packaging:

- Design and manufacture of packaging compliant to decree 98-638 of the 20/07/98 and also to directive 94/62/CE.

7. OTHER INFORMATION

Instruction sheet: all mounting information, available on e-catalog.



For further technical information, please contact Legrand technical support.

Unless otherwise indicated, data reported in this document refers exclusively to test conditions according to product standards.

For different conditions of use of the product, inside electrical equipment or in any different installation context, refer to the regulatory requirements of the equipment, local regulations and design specifications of the system.