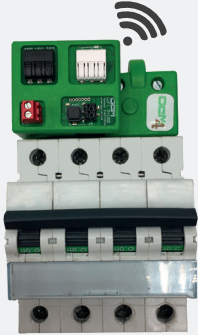




# DATALOGGERS CcM-WIFI



The CcM-WiFi devices are dataloggers and intelligent information managers. They are installed in the principal CcM device and are powered by it whilst recording its data.

Using the external module of the CcM-WiFi family, the user can access the data provided by the principal devices of the CcM family **wirelessly via WiFi**. The CcM-W is connected directly to the CcM device in question via the RS-485 connectors. It is an easy to install solution, adapting to the physical form of the principal CcM devices and **without requiring an external power supply**, as it is supplied by the device that houses it.

In addition to wirelessly providing the data of the principal CcM device that houses it and the possible secondary CcM devices connected to it, they also **store such data in case of loss of Internet connection**, and each CcM-W model provides different complementary functions.

The CcM-WiFi devices may be configured through a **smartphone application** in order to upload data to a cloud server. This application geographically locates the principal CcM device allowing it to be set to local time, and thus configuring the time interval for sending data as required.

Connectivity	802.11b/g/n
Maximum consumption	0.4 W
Power supply	12 VDC
Operating temperature	-25...+50 °C
Protection degree	IP20
Relative humidity	0...95 % at 45 °C

## CCM-W COMMUNICATION OPTIONS

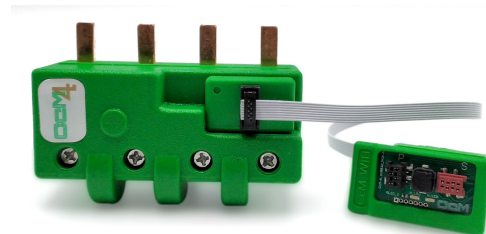
- **Cloud mode:** The device autonomously sends the data to the Energy CcM server. Through our web portal ([scada.energyccm.com](http://scada.energyccm.com)) or the smartphone app the user is able to view both current and historical data and graphs. By default, a data is sent every 10 seconds, being this time configurable according to the needs of the client.

- **FTP mode:** The device stores the data and inserts it in a CSV file that is periodically sent to an FTP server. By default, a data is registered every 10 seconds, being this time configurable according to the needs.

- **Gateway mode:** The device is interrogated by an external PLC in a wireless way through Modbus RTU over TCP or Modbus TCP. This PLC may be the CcMaster (for more information, see the device documentation at [www.energyccm.com](http://www.energyccm.com)).

## ADVANTAGES OF USING THE EXTENSION CABLE

The extension cable gives versatility to the installation and improves the communication between the CcM-WiFi and the router.

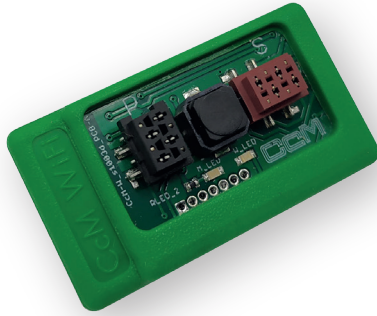


### Advantage 1

Being able to take the CcM-WiFi device out of the distribution box that houses the principal CcM whose data shall be transmitted wirelessly. Specially for metal boxes that can shield the WiFi signal by reducing its coverage.

### Advantage 2

Due to installation requirements, the principal CcM device may be located in an area with difficult access, such as in the case of a circuit breaker with the neutral on the left, which means that the CcM must be installed with the connectors facing the interior of the panel. By using the extension cable the access to the interface (button and LEDs) is recovered to be able to interact with the device more comfortably.



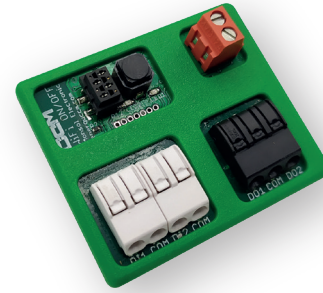
## CcM-W

The CcM-W is one of the devices of the CcM family, whose objective is to be connected to the principal devices (CcM2 and CcM4) of the CcM family to provide them with wireless connectivity.

This device, like all WiFi dataloggers, enables Modbus communication to be maintained between the principal CcMs, respecting the wired connection between the principal CcM housing it and the secondary CcMs connected to the secondary bus in question.

- Data memory of up to 3 months in case of loss of Internet connection.

<b>Total dimensions</b>	19 x 36 x 20 mm
-------------------------	-----------------



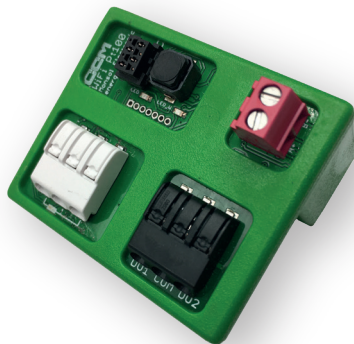
## CcM-W ON/OFF

The most basic solution to implement a regulated photovoltaic self-consumption system, together with a principal CcM. It is an equipment conceived to interact with power cuts or control in the circuit breakers.

- 2x isolated digital inputs. They detect if the circuit is closed between its terminals, or they may be configured as pulse meters (water, gas...)
- 2x isolated digital outputs. To command a recloser or two contactors having the same common point (phase or neutral).
- 1x RS-485 communication port. To interrogate devices from other manufacturers (for example, photovoltaic inverters).

*\* The only WiFi datalogger that does not store data.*

<b>Total dimensions</b>	45 x 38 x 32 mm
-------------------------	-----------------

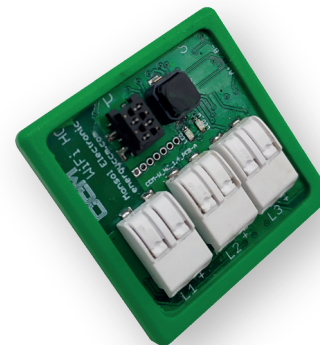


## CcM-W PT100

Designed for the hot/cold sector, it incorporates a Pt100 input for a high precision temperature probe, and two digital outputs to turn the power supply on and off.

- 1x analogue PT100 input. To measure temperature in °C.
- 2x isolated digital outputs. To command a recloser or two contactors having the same common point (phase or neutral).
- 1x RS-485 communication port. To interrogate devices from other manufacturers (e.g. photovoltaic inverters).
- Data memory up to 3 months in case of Internet connection loss.

<b>Total dimensions</b>	45 x 38 x 32 mm
-------------------------	-----------------



## CcM-W HC

Designed to measure currents through current transformers (indirect measurement) and thus be able to incorporate into the system high current measurements of up to 5,000 A.

The necessary current transformers convert the current reading into a voltage signal suitable to be read by the CcM-W HC.

- 3x HC inputs. For connecting up to 3 current transformers.
- Data memory for up to 3 months in case of loss of connection.

<b>Total dimensions</b>	36 x 36 x 22 mm
-------------------------	-----------------