

MORE THAN METERING

ENERGY CCM



- ✓ 1 Module
- ✓ DIN rail

CCMMaster

The intelligent multi-device hub designed to provide
up to six possible connectivity solutions

	LITE	LITE PLUS	LITE NB/2G	"PRO"
Wifi	✓	✓	✓	✓
Bluetooth	✓	✓	✓	✓
CcM native bus	✓	✓	✓	✓
Rs-232 (DLMS y IEC)	✓	✓	✓	✓
Rs-485 ModBus RTU	✓	✓	✓	✓
NB IoT/2G	✗	✗	✓	✓
Ethernet	✗	✓	✗	✓
Digital outputs	✗	✓	✓	✓
Output 0-10 V	✗	✗	✗	✓

Take care of your planet
... take care of you



www.energyccm.com



CcMaster



The CcMaster is an intelligent multi-device hub designed to provide up to six possible connectivity solutions:

NB-IoT/2G, Wifi, Bluetooth, Ethernet, two RS-485 ports and one RS-232 port. In addition, the equipment has two digital outputs and adjustable voltage output from 0 to 10 V.

The **CcMaster** allows not only to read natively the Energy CcMfamily devices, but also to **read IEC and DLMS meters, control and read Modbus inverters and CcMdevices for submetering**, obtaining information and commanding other equipment through reclosers, relays, etc

Therefore, **CcMaster becomes a unique communications solution for energy and self-consumption applications.** All of this is achieved following Energy CcM's philosophy of quality, safety and minimization of the size of our products, being the most compact equipment on the market at the moment (1 DIN rail module).

The **CcMaster** implements several communication protocols: **Modbus RTU over TCP, Bluetooth, Wifi, Ethernet, RS-485 and RS-232. In addition, for NB-IoT communications,** the **CcMaster** implements the MQTT protocol, which is being postulated as the communications standard between this type of device and energy management platforms.

FEATURES

- ✓ Compact design, single module DIN rail.
- ✓ Dual power supply system, through CcM principal devices (grid analysers) and/or an external power supply (9-12V@2A), with automatic power system selector.
- ✓ LiPo battery support for notifications and power failure events.
- ✓ Native connection with CcM principal devices (grid analysers) through IDC connector.
- ✓ Real Time Clock with battery backup.
- ✓ Logging and storage of connected devices readings, as well as events related to the installation.
- ✓ MQTT high level communication protocol for connection to energy efficiency, IoT and SmartCity platforms.
- ✓ Remote update system.
- ✓ Signalling LEDs.
- ✓ Cortex M0+ processor of the STM32 family, with FreeRTOS real-time operating system.
- ✓ Communications:
 - ✓ Ethernet Base 10/100M, for wired network connection and external Ethernet expansions.
 - 2G/NB-IoT with Micro-SIM and external MMCX antenna
 - Bluetooth Low Energy
 - Wifi (802.11 b/g/n) with integrated antenna
 - SigFox (optional and not compatible with 2G/NB-IoT connection)
- ✓ Fieldbuses:
 - RS-485 Modbus: Principal CcM devices (grid analysers)
 - RS-485 Modbus Ext: Isolated RS-485 port for external equipment connection (photovoltaic inverters and other approved equipment)
 - RS-232: Non-isolated RS-232 port for electricity meters connection
- ✓ Inputs/outputs:
 - 2 isolated/potential-free bistable relay outputs (230V@2A) for controlling external elements
 - 1 adjustable DC voltage output, from 0 to 10V, for controlling external systems

EXTERNAL FEATURES

Operating temperature	-20°C to 70°C	Assembly	DIN EN 60715
Storage temperature	-30°C to 85°C	Weight	XXX
Dimensions (mm)	18x91x62	Declaration of Conformity	CEmarking
Box material	PC/ABS flame retardant		