Beeta™ MoCo

Small Scale IoT Edge COmputer

Main features:

- Multiprotocol: RS485, ETH, WiFi
- Flexible retrofit solutions, easy to install and manage (Linux embedded,OTA upgradable, OC output for external relays)
- Small Form Factor
- External antenna connector and status led

Beeta™ MoCo, having relevant computational capacity even if in a small form factor, is one of the most compact small-scale edge computer. It is particularly indicated for retrofitting in the evolutive and corrective maintenance of control systems in buildings, where it allows for powerful and cheap implementation of the edge computing approach connecting to the existing controllers, also adding some sensors and actuators.

Beeta MoCo is based on LINUX Embedded platform, which allows implementing software solutions which can run in a standalone mode or interfaced to remote web services. The use of standardized protocols and communication interfaces makes the solution including Beeta MoCo fully scalable, also thanks to remotely upgrade of embedded SW (OTA). This feature is crucial in order to ensure full modularity and scalability, and it is of great value for the maintenance and upgrading of this electronic control unit.

Beeta Moco is also indicated for the managment of Smart Grids functionalities: for Demand Response applications, Modulation Control of BESS-Battery Energy Storage Systems, Beeta MoCo is the smart device to monitor and manage the bi-directional energy flows of battery storage inverters and other electrical equipment and loads, also in retrofit. It can be used in combination with third-party software platforms, both local and cloud based, for the implementation of integrated electric energy flows management systems in smart grids and energy communities.

General Features	
	ARM Cortex A7 single core @650 MHz processor; optional dual core @800 MHz; optional encryption (AES, DES/TDES - 128, 192 or 256 bit) coprocessor (internal module); this options must be ordered before production batch launch (no retrofit)
	256 MB (up to 512MB) DDR3
	4 (up to 32) GB onboard Flash memory (eMMC)
	Real Time Clock (7 years backup with onboard CR1220 coin battery)
	Linux Embedded, OTA upgradable
	1 push button (Power On/Off)
	1 cold reset button
	2 LEDs for programmable events
	2 status LED: power state, LAN/Internet
Connectivity	
Wired	1x Gbit Ethernet (RJ-45 connector with standard LEDs)
	2x isolated (5kV) RS485 ports
Wireless	Embedded Wi-Fi 802.11b/g/n (optional 802.11ac) with external SMA antenna.
Input/output	
Output	2x Open Collector (max 80 Vdc and 80 mA) 3,75 kVrms optical isolation, PWM capable (up to 30 kHz)
Power	
Input Power	5VDC 1A from external power supply
P2P Encryption	
Wired	Optional Trusted Platform Module (TPM 2.0) soldered chip
Case	
Material	PC/PPO (UL 94 V-0)
Dimensions	3M DIN EN 60715 TH35 52.5 mm x 90 mm x 58 mm (without external antenna); weight 0,5 kg
Environment	
Operating	Temperature Range -40 ÷ 85 °C, RH range 5%-55% not condensing
Storage	Temperature Range -40 ÷ 85 °C, RH range 5%-90% not condensing

MADE IN ITALY CE

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