



EG-Enerbatt 3G

Wireless battery analysis, monitoring and protection system

The voltage equalization function between the individual blocks guarantees the lowest installation and operating cost, maximum performance and battery system life.



Applications

- Server rooms
- Data centers
- Telecommunication equipment
- Industrial automation systems
- TV broadcast equipment

- Video surveillance equipment
- Electrical panels and cabinets
- Electromedical equipment
- Energy storage systems

Characteristics

- Total flexibility with 2.4 GHz wireless communication technology that requires no preventative design and allows rack and cabinet configurations to be changed at any time.
- Everything easily under control: the most important parameters of each battery block are measured, including impedance, voltage, current and temperature.
- Very simple and fast installation ensures good savings.
- Each block has an equalization function to prevent spikes and maximize battery life and performance.
- Each EG-ENERBATT system can monitor and protect up to 750 blocks.
- Automatically disables the measurement instrument if the end-of-discharge voltage is reached in order to safeguard the batteries.
- The measurement instruments are re-enabled automatically when the charging current is restored.
- Update frequency of 1 Hz ensures accurate measurements.
- Simultaneous management of batteries of different capacities and types (e.g. VRLA, AGM, NiCd, OPTS, OPZV, etc.) and mixed voltage configurations (e.g. 48 V and 240 V battery systems).
- Color touch screen display to clearly see configurations and parameters, including diagrams and voltage trend plots.
- Programmable alarm level.
- · Alarm alerts via email and dry contact.
- Removable SD card for event storage.
- RS485 port for communication between the receiver and control panel for monitoring large plants.
- Ethernet port and additional RS485 port for remote monitoring.

Key options

- Temperature sensor for each block.
- · Sensor kit for use with Ni-Cd batteries.
- Additional antenna for each battery string meter (BMS-SMK) to extend the wireless range.
- Dedicated software for remote monitoring and data storage.



PMA EG-Enerbatt-3G / PMS01250825

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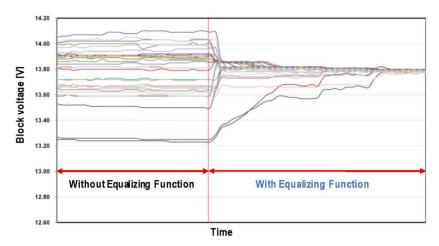
Register: vl. č.: 71986/L, Okresný súd Žilina





Battery voltage equalizer

Continually equalizes the end-of-charge voltage of the batteries to the optimal level in order to prevent overcharging and ensure the best performance and durability. With the equalization function active, the voltage of each battery block is continually kept at the ideal value



Wireless Battery Monitoring System

Easy

The wireless design simplifies installation and makes maintenance cost effective

Flexible

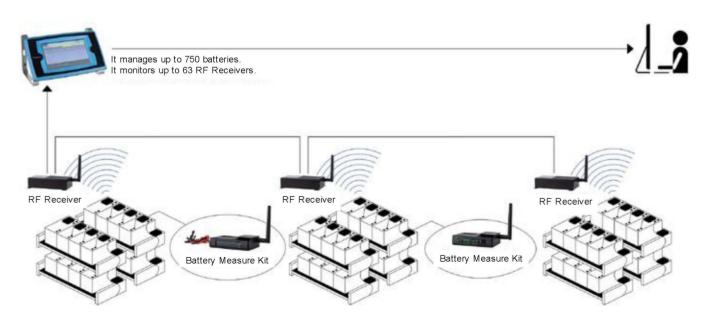
No pre-design is needed, it can be adapted easily to any further configuration changes.

Intelligent

Real-time monitoring via graphic LCD touch screen or web, programmable email alarms. Guarantees savings in investment and operating expenses (CAPEX and OPEX).

Powerful

One collector for up to 750 batteries of any type and 63 RF receivers. Battery protection is always active thanks to the equalization functions.



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Technical specification

Model BMS			Specifi	cations		
BMS-DC-LCDII (Central Unit)	User interface	7" color LCD touch screen display				
	Supply voltage	12 Vdc				
	Power consumption	≤ 9W				
	Communication ports	Ethernet, 2 RS485 Modbus RTU,				
		dry relay contacts (1 in / 3 out)				
	RF receiver monitoring	Up to 63 RF receivers				
	Wireless devices that can be connected	Up to 750				
	Storage capacity	SD memory card up to 16 gigabytes				
	Dimensions (WxDxH) [mm]	260 x 57 x 150				
	Weight [kg]	0.85				
BMS-RFR (RF receivers)	Supply voltage	12 Vdc				
	Power consumption	≤ 3W				
	Operating frequency	RF 2,4 GHz (wireless) 1)				
	Wireless devices that can	Up to 256				
	be connected					
	Dimensions (WxDxH) [mm]	129 x 70 x 35.5				
	Weight [kg]	0.4				
BMS-BMK (Battery meter)	Voltage	1.2 V (Ni-Cd)	2 V	6 V		2 V
	Measurement range	0.95-2.00 V	1.48-4.00 V	4.2-8.0 V		6.0 V
	Tolerance	±5 mV ±10 mV			mV	
	Impedance measurement	2 μΩ		10 μΩ	>65 Ah	<65 Ah
	accuracy	15 μΩ 25 μΩ				
	Measurable temperature 2)	0-100°C ± 1°C				
	Power consumption	≤ 0,5 W				
	Inputimpedance	≥1 mΩ				
	Dimensions (WxDxH) [mm]	100 x 70 x 27				
	Weight [kg]	0.1				
BMS-SMK (Battery Monitoring System) SMK (String Meter)	Measurement range	0-120 V 120-750 V			-750 V	
	Tolerance	± 0.2 %				
	Measurable temperature	0–100°C ± 1°C				
	Measured current range 3)	0-3000 A				
	Supply voltage	12 Vdc				
	Power consumption	≤ 1,5 W				
	Input impedance	≥ 1 mΩ				
	Dimensions (WxDxH) [mm]	100 x 70 x 27				
	Weight [kg]	0.09				

Notes:

- 1) The maximum transmission distance is estimated to be 50 m if there are no obstacles. A distance of less than 20 m is recommended for optimal performance.
- 2) The optional temperature sensor (TES) is required in order to measure the temperature.
- 3) The optional Hall-effect current transformer (HCT) is required in order to measure the battery current.

Specifications subject to change without notice.

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