

# **Enerbatt 3G**



# *NAblerex*

## **ENERBATT 3G**



# ENERBATT 3G Wireless battery analysis, monitoring and protection system

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

### **Applications**

- Server rooms
- Data centres
- Telecommunications equipment
- Industrial automation systems
- TV broadcast equipment

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

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## **ENERBATT 3G**

- 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 maximise battery life and performance.
- Each 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.

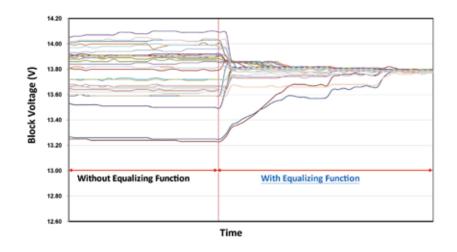
- Update frequency of 1 Hz ensures accurate measurements.
- Simultaneous management of batteries of different capacities and types (e.g. VRLA, AGM, NiCd, OPTS, OPZV, etc.) and mixed voltage configurations (e.g. 48 V and 240 V battery systems).
- Colour touch screen display to clearly see configurations 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.

#### 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

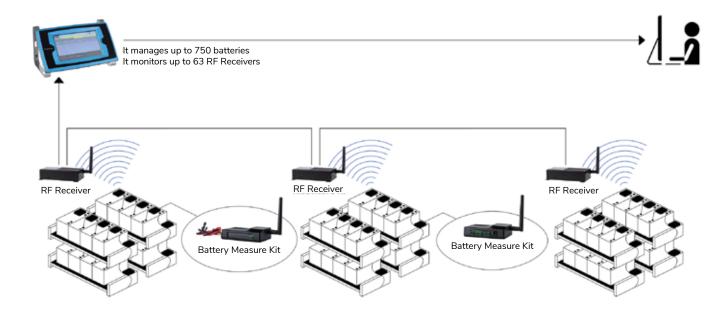
No pre-design is needed, it can be adapted easily to any further configuration changes.

#### 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 equalisation functions.





# **ENERBATT 3G**

#### **ENERBATT 3G TECHNICAL DATA SHEET**

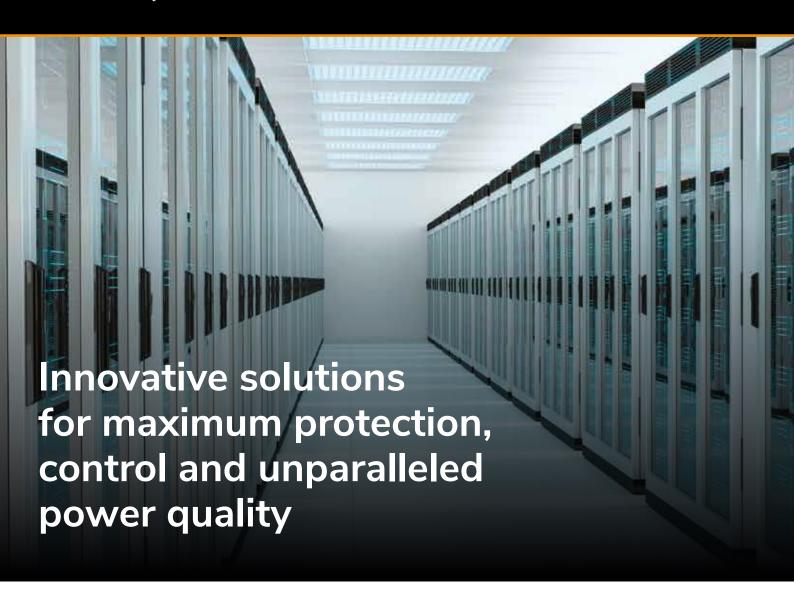
MODEL		SPECIFICATIONS					
BMS-DC-LCDII (Central Unit)	User interface	7'' colour LCD touch screen display					
	Supply voltage	12 Vdc					
	Power consumption	≤ 9 W					
	Communication ports	Ethernet, 2 RS485 Modbus RTU, dry relay contacts (1 in/3 out)					
	RF receiver monitoring	Up to 63 RF receivers					
	Wireless devices that can be connected	Up to 750					
	Storage capacity	SD memory card up to 16 gigabytes					
	Dimensions (WxDxH) mm	260x57x150					
	Weight (kg)	0.85					
BMS-RFR (RF receivers)	Supply voltage	12 Vdc					
	Power consumption	≤ 3 W					
	Operating frequency	RF 2.4 GHz (wireless)*					
	Wireless devices that can be connected	Up to 256					
	Dimensions (WxDxH) mm	129x70x35.5					
	Weight	0.4					
BMS-BMK (Battery meter)	Voltage	1.2V (Ni-Cd)	2 V	6 V	12	12 V	
	Measurement range	0.95–2.00 V	1.48-4.00V	4.2-8.0V	8.5–1	8.5–16.0V	
	Tolerance	±5 mV ±10 mV					
	Impedance measurement accuracy	2 μΩ		10 μΩ	>65 Ah 15 μΩ	<65 Ah	
	Measurable temperature**	0-100°C ±1°C					
	Power consumption	≤ 0.5 W					
	Input impedance	≥ 1 mΩ					
	Dimensions (WxDxH) mm	100x70x27					
	Weight (kg)	0.1					
BMS-SMK (Battery Monitoring System) SMK (String meter)	Measurement range	0-120 V 120-750 V					
	Tolerance	±0.2%					
	Measurable temperature	0–100°C ±1°C					
	Measured current range***	0–3000 A					
	Supply voltage	12 Vdc					
	Power consumption	≤1.5 W					
	Input impedance	≥1 mΩ					
		100x70x27					
	Dimensions (WxDxH) mm		100x7	70x27			

<sup>\*</sup> 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.

<sup>\*\*</sup> The optional temperature sensor (TES) is required in order to measure the temperature.

<sup>\*\*\*</sup> The optional Hall-effect current transformer (HCT) is required in order to measure the battery current.







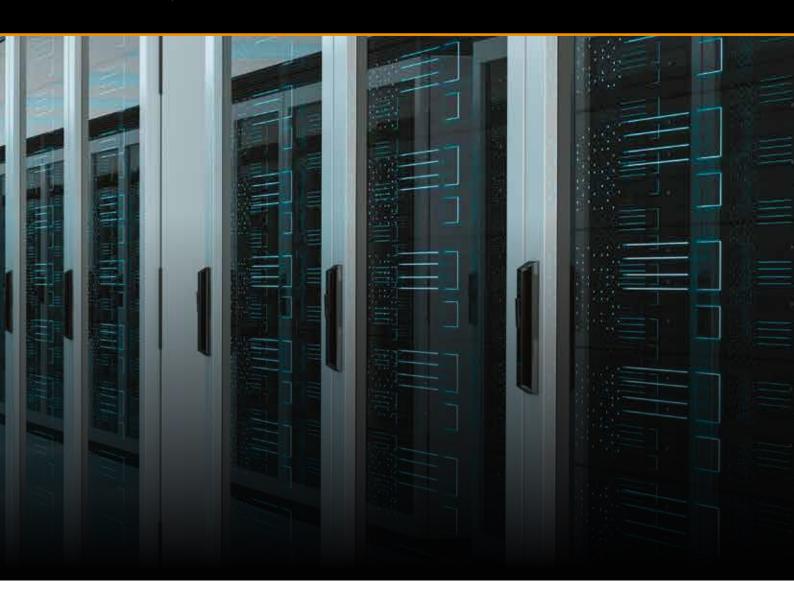




**Enersine APF** 

# **POWER QUALITY DEVICE**









Ermes Enerbatt 3G



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