

WIRELESS BATTERY MONITORING SYSTEM





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The CELLGUARD[™] Wireless Battery Monitoring System (BMS) provides an accurate and reliable indication of battery state-of-health through monitoring and analysis of battery voltage, temperature, and conductance. With solid noise immunity, the system is suited for applications including power utilities, data centers, telecommunications systems, and DC systems with filtered AC electrical ripple.



ACCURATE CONDUCTANCE MONITORING

Conductance-based monitoring technology provides the most accurate, efficient, and non-invasive method possible for monitoring a battery's state-of-health.



ADVANCED HARDWARE

Comprised of a Base Coordinator Unit (BCU) and single-battery sensor modules, the system provides both visual and digital battery state-of-health and is capable of monitoring up to 16 battery strings, up to 300 sensors per string, and up to 600 sensors per BCU (irrespective of how they are divided by strings).



WEB INTERFACE

The highly intuitive CONVERGE[™] web interface enables rapid, confident installation, remote system monitoring, alarm threshold configuration, rock-solid reporting (including granular discharge data gathering), and critical over-the-air sensor firmware updates.



WIRELESS COMMUNICATION

Installation cost and time are reduced with the system's wireless communication capabilities which enable all hardware to communicate free of cabling.



NERC PRC-005 COMPLIANCE

Meet NERC PRC-005 regulations requiring maintenance of all Protection Systems, Automatic Re-closing, and Sudden Pressure Relaying affecting the reliability of the Bulk Electric System (BES) so that they are kept in working order.

BASE COORDINATOR UNIT







SENSOR MODULE



CONVERGE[™] WEB INTERFACE

Configure, update, and monitor your entire network remotely.

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OVERVIEW						
OVENVIEW			() Franklin	Electric HOME REPO		
	0				Logged in est	Fireprost Unit 01 🕀 💵
SYS	STEM ALARMS		STATUS			
3	12		Battery 1	String: 2V NERC		
STRINGS	BATTERIE	.8		Weasurements	C 11	surements
			Timestamp	Mar 18, 2021, 4:18:01 PM		Mar 18, 2021, 2:10:06 Pl
			Voltage Temperature	2.244 V 72 *F	Voltage Temperature	2.245
			Temperature	12.1	Conductance	1,671 (1,764)
					Conductance %	97 ¹ 1 µ
PURPLE 1	BLUE 2	YELLOW 3			Strap Resistance	٦µ
ALARMS: 0	ALARMS: 0	ALARMS: 0	Battery 2			
WARNINGS: 0	WARNINGS: 0	WARNINGS: 0	Dantory 2	String: 2V NERC		
-		-				
			VT Timestamo	Measurements Mar 18, 2021, 4:18:01 PM		isurements Mar 18, 2021, 2:10:12 Pl
			Voltage	Mar 18, 2021, 4:18:01 PM 2.249 V	Voltage	Mar 18, 2021, 2:10:12 Pt 2:249
			Temperature	72 °F	Temperature	72 *
					Conductance Conductance %	1,647 (1,730)
					Strap Resistance	300 µ
			Battery 3			
			Battery 5	String: 2V NERC		
				Measurements	G Men	ssurements
			Timestamp	Mar 18, 2021, 4:18:01 PM 2.253 V		Mar 18, 2021, 2:10:17 P 2:254



CONFIGURATION

Two-way communication inside your network allows for remote configuration, setup, changes, and firmware updates. This eliminates the need to roll a truck to a site which can be costly and time consuming. Configurations can be downloaded and saved or used to program additional sites with similar configurations.

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TOOLS

Remotely update BCU and sensor firmware, configure Modbus, force manual voltage, temperature, and conductance tests and perform a system reset.



OVERVIEW

Get a quick and concise visual overview of alarms and warnings for every battery in your system.



STRING & BATTERY STATUS

Get a complete state-of-health assessment of each battery and string with real-time access to battery voltage, temperature, conductance, and inter-cell connection resistance.







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