EMSYS

WIRELESS BATTERY MONITOR

There are three sensor types for different measurement ranges:

- CSPY-400-0 (batteries with nominal voltage 2 - 12 V)
- CSPY-400-1 (batteries with nominal voltage 12 V - 16 V)
- CSPY-400-2 (batteries with nominal voltage 1.2 V)

CellSPY measures the battery's ohmic value of both metallic and chemical paths. Unlike other monitors on the market, which consume 10s and 100s of Amps during internal ohmic value measurements, CellSPY "gets the job done" using 1 A of load current for a fraction of a second.

CellSPY Wireless Battery Monitors are designed to measure and continuously report the following parameters:

- DC voltage across the battery terminals
- AC ripple voltage across the battery terminals
- Battery's ohmic value
- Temperature at negative battery post

Thanks to its advanced DSP-based noise filtering, ultra-fast 24 bit ADC's and negligible current dissipation, CellSPY is the smallest and most technologically advanced Battery Monitor on the market today.

OPERATING SPECIFICATIONS

DC Voltage Measurement:	Range 1.2 V - 16 V Resolution 1 mV Accuracy 0.5 %
Temperature Measurement:	Range 0 ºC - 80 ºC Resolution 0.01 ºC Accuracy +/- 1 ºC
Impedance Measurement:	Range 0 - 65 mΩ Resolution 1 µΩ Accuracy Better than 3 %
AC (Ripple) Voltage Measurement:	Range 0 - 200 mV RMS Resolution 1 mV Accuracy 1 % Max Freq 400 Hz (no attenuation)
Wireless Communication:	Frequency ISM Band - 2.4 GHz DSSS Range indoor > 50 m (expandable with repeaters)
Approvals:	CE FC RoHS

Power supply:	Range 1.2 VDC - 16 VDC / 1.2 A (voltage depending on sensor type)
Operating Temp.:	0 °C to 60 °C (32 °F to 140 °F)
Storage Temp.:	0 °C to 60 °C (32 °F to 140 °F)
Humidity:	5 - 85 %, non-condensing
Dimensions & Weight:	2.9" x 1.2" x 0.5" (74 mm x 32 mm x 13 mm) 2.2 oz (60 g)
Enclosure:	Material: PC Degree of protection: IP40 IK code: IK08

KEY ATTRIBUTE

CellSPY can measure a battery's ohmic value in a very noisy environment with negligible power disipation, making itself, almost "invisible" to the monitored battery.