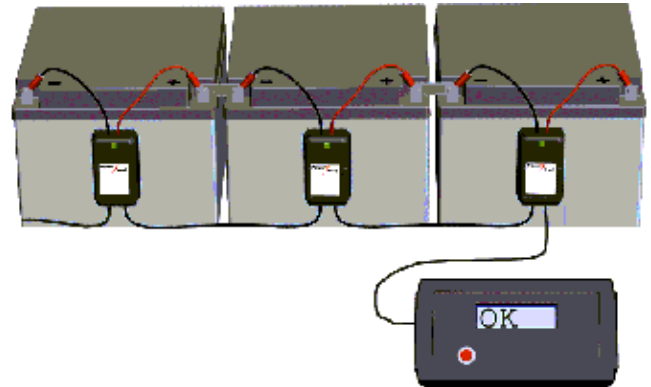


PowerTrac™

Battery Data Logger

MP Series

The PowerTrac MP is a high performance, low cost battery data logging system developed to meet the monitoring needs of large battery strings. PowerTrac's modular monitoring approach allows end-users to continuously log the voltage and temperature of individual batteries within a string as well as the string current. The logged data is available to end users through a variety of interfaces such as RS-232, RS-485, IrDA, and/or LAN. This flexibility allows end-users the convenience to choose the interface that best fits their specific needs.



Advantages:

- Modular design
- Low cost / High Performance
- Fully programmable

Applications:

- UPS / Backup power systems
- Electric / Hybrid electric vehicles and buses
- Telecom

FEATURES & BENEFITS

❖ **Individual Battery Monitoring**

The PowerTrac MP modular approach gives the most accurate, detailed reporting of battery string data. The PowerTrac MP system consists of individual monitoring devices that are connected across battery modules and a central HUB. The monitors are connected to the central HUB via an isolated RS-485 serial data bus.

❖ **Measure and Track Battery Performance Data**

The PowerTrac MP measures and logs battery performance data including:

- Individual battery voltages and temperatures
- Battery string current
- Charge and discharge Amp-Hours
- Over/under voltage, over current, and over temperature alarms

❖ **Continuous Data Logging**

The PowerTrac MP continuously tracks and logs individual battery activity. Continuous monitoring ensures that battery string activity is consistently observed/detected and the end-user is made aware of the state of individual batteries within the string.

❖ **Advanced User Interface**

The PowerTrac MP incorporates advanced user interfaces including an RS-232 communication port, an infrared (IR) port, Windows GUI and Palm OS interfaces, as well as an optional LAN interface.

❖ **Low Cost / High Performance**

The PowerTrac MP is a high performance, low cost alternative to existing high cost monitoring solutions. PowerTrac's high performance guarantee ensures that users are provided with the critical data needed to increase battery system reliability.

For further information and additional technical data sheets, please visit our website at www.powerdesigners.com or contact PowerDesigners, LLC at +1.608.231.0450

PowerTrac MP Monitor Specifications

Specifications	PTMP-M-12V
Voltage Rating	2V-12V
Operational Voltage Range	0.9V-18V
Voltage Resolution	± 30mV @ 12V ; ± 5mV @ 2V
Operating Current Draw	< 5mA @ 12V ; < 20mA @ 2V
Operating Temperature Range	-40°C to 70°C
Temperature Resolution	± 1.5°C
Communication	Isolated RS 485 4-wire bus (2500V isolation)
Sampling Rate	<ul style="list-style-type: none"> ➤ 0.5 s (Quick look) ➤ 2 s (All look)
Protection	<ul style="list-style-type: none"> ➤ Over Voltage ➤ Reverse Polarity Protection ➤ Resettable Fused Link
Dimensions (LxWxH)	2.5" x 1.55" x 0.5"
Packaging	<ul style="list-style-type: none"> ➤ Sealed, Splash Proof ➤ UL 94V-0, IP66

PowerTrac MP HUB Specifications

Specifications	PTMP-HUB
Power Supply	12 VDC (Optional 120VAC/12VDC transformer)
Power Consumption	<5W
Communication	Isolated RS-485 4-wire bus (2500V isolation)
Sampling Rate	<ul style="list-style-type: none"> ➤ 0.5 s (quick look) ➤ 2 s (all look)
Interface Type	<ul style="list-style-type: none"> ➤ RS 232 ➤ IrDA infrared port ➤ LAN
Current Measurement	Current sense module
Max. Monitors per Hub	64 channels (128 channels option)
Logging	<ul style="list-style-type: none"> ➤ String Current ➤ Amp Hour charge and discharge ➤ Cycle times
Dimensions (LxWxH)	5.6" x 3.2" x 1.5"

PowerTrac MP Current Sense Specifications

Specifications	PTMP-CS
Power Supply	5 VDC
Power Consumption	<1W
Communication	Isolated RS-485 4-wire bus (2500V isolation)
Current Measurement	Isolated 50 mV shunt
Charge/Discharge Current Range	Low Resolution: 0-1A High Resolution: 0-100/200/500 A
Current Accuracy	± 0.5% of full scale
Dimensions (LxWxH)	3" x 1"