



Preliminary

Category: Energy Storage

Battery (Lithium), 2.1 kWh

Item # 02-1000076

Smart Power

The lithium 2.1 kWh battery is ideal for large energy storage applications where system monitoring and weight are critical factors. The batteries communicate through a simple CAN bus connection, allowing the operator to monitor individual statuses of multiple batteries on a single common network. The CAN bus-enabled battery management system (BMS) provides intelligent control options to unlock the maximum performance of the LiFePO_4 chemistry.



General

Nominal Voltage	24 VDC
Battery Chemistry	LiFePO_4
Capacity	82 Ah
Energy Storage	2.1 kWh
Energy Density	101 Wh/kg
Max Charge Rate	120 A continuous
Max Discharge Rate	200 A continuous
Self-discharge Rate*	< 5% per month
Cycle Life	~ 1000 cycles @ 1C to 80% depth of discharge up to 100 °F (38 °C)
Storage Life*	1 year
Battery Voltage Range	20 to 30 VDC
Battery Monitoring	CAN bus-enabled battery management system (BMS)
Warranty	1-year materials and workmanship

*@ 77 °F (25 °C)

Safety

Internal Protections	<ul style="list-style-type: none"> Self-shut down in unsafe conditions (under/over voltage and current protection) Built-in continuous self balancing Hermetically sealed cells with integrated over pressure safety vent
Certifications	Compatible with MIL-STD-1275E power, UN 38.3

Connections

Power	Standard automotive battery terminals
Data	Binder 723 series

Features

- High cycle life
- Networkable battery monitoring (J1939 CAN bus)
- One-year storage life
- Circuit protection
- Internal cell heating for full battery capability in low-temperature operation

Environmental

Operating Temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Storage Temperature**	-50.8 °F to 159.8 °F (-46 °C to 71 °C)

**Prolonged exposure to high temperatures in storage will reduce battery life.

Weights and Dimensions (L x W x H)

Weight	45 lb (20.7 kg)
Dimensions	10.6 x 10.1 x 9.1 in (26.9 x 25.6 x 23.0 cm)

Transportation

Transportation Class	Class 9, UN3480
Harmonized Tariff Code	8507.60.0020

