



SOLAR STIK®

Category: Energy Storage

24VDC Li ESM 2000

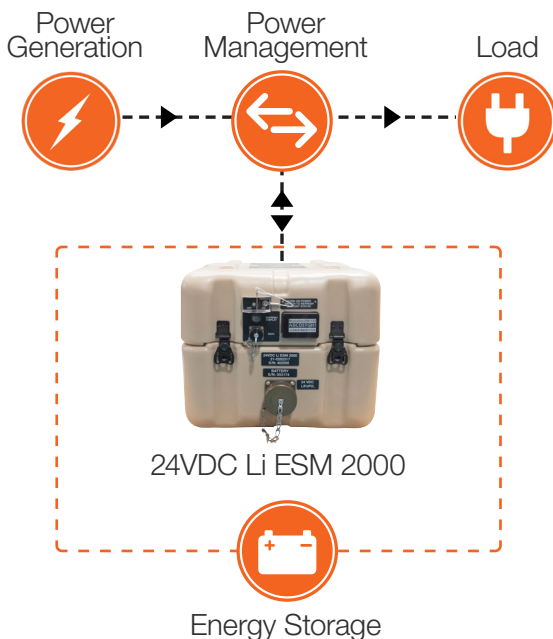
Item # 21-0202317

Smart Storage

The Li Energy Storage Module (ESM) 2000 is ideally suited for hybridized power or silent watch applications requiring reliable high discharge, continuous or pulse power, fast re-charge, and high levels of safety. The battery's lithium iron phosphate cathode material and Superphosphate (SLFP) technology provide enhanced safety and stable internal resistance yielding extraordinarily high cycle-life and resiliency to adverse operating conditions. A highly intelligent Battery Management System (BMS) protects the cells from unsafe operating conditions and provides precise data about the battery's cells, both historical and current.

How an ESM Works

ESMs are the heart of a Solar Stik Hybrid Power System (HPS). Power generated in an HPS from all sources is stored in the ESMs and distributed to the load as needed, significantly extending generator fueling and maintenance intervals. Stack additional Li ESMs to increase energy storage capacity, further reduce required support, and extend operational endurance.



Features

- Maximum capacity, simple form factor, minimum weight
- Communication of battery state of charge, temperature, and other key parameters via J1939 CAN Bus
- Networkable battery monitoring (J1939 CAN bus)
- Fast charging under varying conditions
- 5-stage State of Charge Indicator
- Built-in self-balancing
- Built-in test at start-up and during operation
- Cell heating allows full battery capability over operating temperature
- Self-shutdown in unsafe conditions
- Battery has internal protection for overcharge, over-discharge, overload and short-circuit
- Impact resistant case with molded-in stacking ribs
- Scalable and hot-swappable
- Plug & Play with polarized, twist-lock connection





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General

Battery	(1) Saft X6T-E LiFePO ₄ Battery
Nominal Voltage	26.4 VDC
Nominal Capacity	2.1 KWh (82 Ah)
Energy Density	73 Wh/kg
Max Charge Rate	100 A continuous
Max Discharge Rate	100 A continuous
Cycle Life	<ul style="list-style-type: none"> >1000 cycles to 30% capacity for loss at 38 °C >500 cycles to 30% capacity loss at 50 °C
Battery Voltage Range	20-30 VDC
SOC Indicator	ePaper display with push button refresh
Case	Pelican AL1212-0605FM Single Lid Case
Warranty	1-year materials and workmanship

Safety

Battery and User	Multiple battery internal SW & HW protection
Breaker(s)	100 A, 150 VDC, 1 Pole, UL Recognized, 5000 A SCCR
Reverse Polarity	Polarized Connectors
Case Pressure Relief Valve	0.5 PSI
Inadvertent Activation	Cotter Pin with Guard on ON/OFF Switch
Certifications	<ul style="list-style-type: none"> UN 38.3 Designed to MIL-STD-810H Compatible with MIL-STD-1275E

Connections

Output(s)	(1) Data Port (PT02SE12-10SW)
Input(s)/Output(s)	(1) Power Port (AIB2-32-5SC)

Environmental

Operating Temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Charge 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)
Ingress Protection	Designed to IP67

Weights and Dimensions (L x W x H)

Weight	63.5 lb (28.8 kg)
Dimensions	15 x 15 x 12 in (38.1 x 38.1 x 30.48 cm)

Case Color Options



Standard Color Optional Colors

Recommended Compatible Components and Accessories



24VDC 2-Pin Inter-Connect Cable
Item # 13-1000294



24VDC Inter-Connect Strip 7
Item # 13-1000160

