



SOLAR STIK®

Category: Power Management

24VDC PRO-Verter S 2000-120

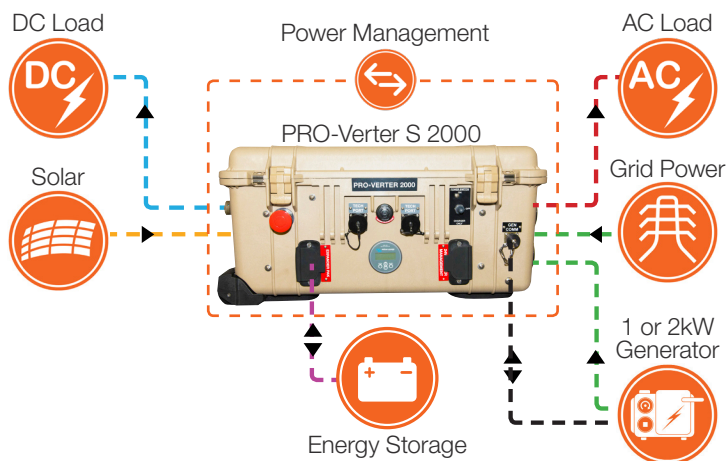
Item # 20-0104025

Power with an Extra Boost

A Portable Remote Operation Inverter/Charger (PRO-Verter) provides a single point of power management, control, and distribution to a battery-based electrical circuit. The PRO-Verter S 2000 has an internal solar charge controller capable of accepting up to 1400 watts of DC input power from photovoltaic panels. The inverter function can provide 1600 watts continuous, pure sine wave AC power. The PRO-Verter S 2000 is designed to operate with a 1 or 2 kW fuel-driven generator in a hybrid power system and can automatically start or stop the generator based on the battery bank's state of charge.

How a PRO-Verter Works

A PRO-Verter is the primary power management component in a hybrid power system. It handles load prioritization, manages generator functions, records system status, charges the battery bank, and powers AC loads using energy stored in the batteries. Additionally, the PRO-Verter S 2000 is capable of accepting DC input power from photovoltaic panels. When any PRO-Verter is used with a generator, it increases system performance by maximizing generator output and minimizing generator runtime.



Legend	
■ DC Solar Circuit	■ DC Load Circuit
■ Inter-Connect DC Circuit	■ Data Circuit
■ AC Input Circuit	▶ Direction of Flow
■ AC Load Circuit	■ Product Category



Features

- High-efficiency circuits for inverting and charging
 - 1600 W continuous power output
- Automatic power source prioritization
 - Solar > Grid > Generator
- Solar input up to 1400 W
- Compatible with 1.0–2.0 kW generators
 - Auto Generator Start/Stop
- Programmable LCD user interface with built in remote monitoring capability
- Open architecture
- Stacks vertically with all Pelican 16XX cases



PRO-Verter S 2000 Faceplate





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General

Nominal Operating Voltage	24 VDC
Input Battery Voltage Range	19–33 VDC
Internal Cooling	Forced convection
User Interface	External LCD status display, internal color graphical user interface
Case	Pelican 1610
Warranty	1-year materials and workmanship

Inverter Specifications (@ 77 °F/25 °C)

Nominal AC Output Voltage	120 VAC ± 2%
Rated Current	20 A
Output Frequency and Accuracy	60 Hz ± 0.1%
Continuous Output Power	1600 W (2000 VA)
Load Support	Batteries supplement AC Input up to 20 A total
Peak Current	20 A (25 A instantaneous)
Efficiency	94%
Transfer time	< 20 ms
Waveform	Pure sine wave
5-second Surge Power	2200 W

DC Charger Specifications (@ 77 °F/25 °C)

Charging Stages	Bulk, absorb, float, equalize
Continuous Output Current	50 ADC

Charge Controller Specifications (@ 77 °F/25 °C)

Maximum PV Input Voltage	100 V
Maximum PV Input Current	60 A
Maximum PV Input Power	1400 W
Efficiency	98%
Charging Stages	Bulk, absorb, float, equalize

Safety

Breaker(s)	(2) AC Input 25 A, (1) AC Output 25 A, (1) DC AUX Output 15 A
Emergency Stop	Disables all circuits except the Inter-Connect (DC bus)
Overcurrent Protection	25 AAC
Overtemperature Protection	Output reduced or cutoff above 149 °F (65 °C) internal temperature

Environmental

Operating Temperature	-28 to 120 °F (-33 to 49 °C)
Standards	<ul style="list-style-type: none"> Designed for MIL-STD-810G Drop Test Designed for MIL-STD-810G Loose Cargo Test



Connections

Input(s)	<ul style="list-style-type: none"> (2) AC Input 20 A (NEMA 5-20P, Maringo 200BBI-RV) (2) PV Input 50 A (24 VDC amphenol bayonet CB2-22-2SC) (1) Generator Communications Port (MS3122F12-10P)
Output(s)	<ul style="list-style-type: none"> (1) AC Output 20 A (NEMA 5-20R) (1) AUX Load 20 A (MS3470W14-4P)
Input/Output(s)	<ul style="list-style-type: none"> (1) 24 VDC 100 A In/Out Inter-Connect Port* (1) 24 VDC 100 A Expander Pak Inter-Connect Port* (1) 24 VDC 100 A Power Management Inter-Connect Port* (2) Tech Ports (RJ45) for Remote Monitoring and Expansion

*Deltran 224-0061-BK

Weights and Dimensions (L x W x H)

Weight	75 lb (34 kg)
Dimensions	26 x 20 x 12 in (66 x 51 x 31 cm)

Case Color Options

Tan	Black
	Silver
	Orange
	Yellow
	OD Green
Standard Color	Optional Colors



Recommended Components and Accessories



420W PAM Expedition
Item # 11-1000020



Li Expander Pak 1300
24VDC – Item # 21-0202316

