



Grid-Tied PV Inverters

PVI 1800 PVI 2500

a breakthrough in price and quality

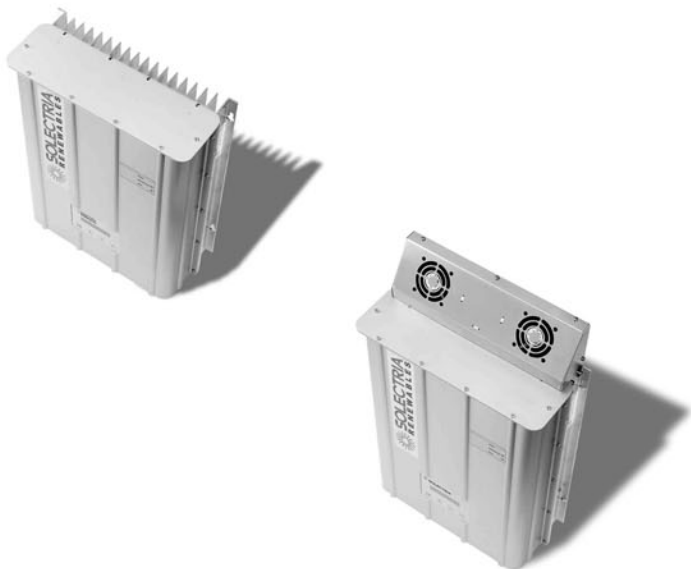


Solectria introduces the PVI 1800/PVI 2500 inverter:
exceptional quality and efficiency at an extraordinary price.



INVERTER SPECIFICATIONS

	PVI 1800	PVI 2500
Input		
Continuous Power	1950 W	2700 W
Recommended Max. PV Array Power, STC rating	2200 Wp DC	3200 Wp DC
MPPT Voltage Range	125V DC – 350V DC	125V DC – 350V DC
Maximum Voltage (OCV-Cold)	400V DC	400 V DC
Maximum DC Current	11 ADC	15 ADC
Output		
Continuous Power	1800W	2500W
Nominal Voltage	240/208V AC	240/208V AC
Voltage Range (-12%/+10%)	240/208V AC	240/208V AC
Nominal Current	7.5 /8. 7A	10.4/12A
Frequency	60 Hz; ±1%	60 Hz; ±1%
Power Factor	Unity	Unity
Distortion Factor (THD)	<4%	<4%
Maximum Efficiency	94.5%	94.5%
General Information		
DC and AC Connections	Pre-wired	Pre-wired
Housing Material	Aluminum	Aluminum
Convection Cooling	Yes	Yes/Fan
Weight	34.2 lbs / 15.5 kg	36.4 lbs / 16.5 kg
Ambient Temperature (full power)	-13°F to +130°F	-13°F to +130°F
Relative Humidity	95%	95%
Enclosure	NEMA 4 / IP 65	NEMA 4 / IP 65
Length	18.5 inches (470 mm)	23.8 inches (600 mm)
Width	13.1 inches (333 mm)	13.1 inches (333 mm)
Height	5.63 inches (143 mm)	5.63 inches (143 mm)
Communication		
Display and Indicators	LCD display & LEDs for status indication, error messages, instantaneous & historical data.	
External Communication	RS 232 or 485 (standard equipment-automatic recognition of RS 232 or 485)	
Data Monitoring	Optional SolrenView or Fat Spaniel, also compatible with others	
Standards		
	Listed to UL 1741, IEEE std 1547	
	FCC part 15 A&B	FCC part 15 A&B
	ANSI C62.41 C1 & C3	ANSI C62.41 C1 & C3
Warranty		
	Standard 5 years Optional extended warranties to 10 & 15 years	



INTEGRATED PANEL ASSEMBLIES



OVERVIEW

The Integrated Panel Assemblies are options for the PVI 1800 or PVI 2500 inverters. They can be used with inverters set to 240VAC or 208VAC. These panels make installing a PV system even faster and easier. The complete panel with inverter weighs only 65 lb (29.5 kg) and can ship UPS. The standard version includes visible-blade AC and DC disconnects, an optional revenue grade, factory sealed, reconditioned kWh meter all mounted on an aluminum panel using stainless steel hardware. The design compliments the sleek, low profile inverters providing a clean, compact installation whether indoors or outdoors.

APPLICATIONS

- 1-3 kW single panel residential or commercial installations.
- Multiple 1-3 kW residential or commercial separately metered systems in town houses, condos or apartments.
- Two & three-inverter panels available for 4-9 kW Systems (3.6-7.5 kW AC). Multiple paralleled panels are used without kWh meters and the panels are combined to go through a single kWh meter.
- Versions available with various parts omitted, added or substituted to meet any state, municipal or utility requirement.

PANEL CONFIGURATIONS

Single-Inverter panels

33" wide (65 lbs).

(All Panels are 26.8" high)

Double-Inverter panel

with DC disconnect, optional AC breaker panel and optional kWh meter 45" wide (104 lbs).



Triple-Inverter panel

with DC disconnect but no meter/socket or AC disconnect: 48.5" wide (127 lbs).



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RELIABILITY

The PVI 1800/PVI 2500 provides industry leading reliability. One look at the automated production and PCB assembly inside the inverter shows its industrial quality. Rigorously designed and tested for the harshest conditions, the PVI 1800/PVI 2500 proves to be consistently reliable.

EASY TO INSTALL

The PVI 1800/PVI 2500 can be installed easily and quickly, both indoors and outdoors. With a weight of 35 lbs [16kg] (compared to an average 70 lb [32kg] for a typical inverter) the PVI 1800/PVI 2500 is very easy to handle. The inverters also include 'pre-wired' AC and DC cables for quick wiring at the jobsite without opening the inverter!

EASY TO OPERATE: PLUG AND PLAY MONITORING

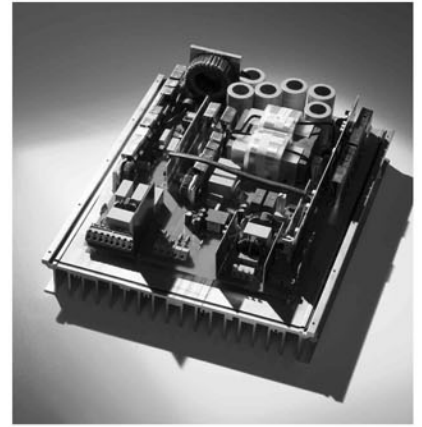
With the PVI 1800/PVI 2500, Solectria Renewables once again confirms its innovative reputation. With LCD display and auto detect RS232/485 as standard equipment, there is true "plug and play" capability. This gives the PVI 1800/PVI 2500 a PC interface with excellent monitoring and data acquisition capability. Free PC software. Optional SolrenView or Fat Spaniel web-based monitoring. Also compatible with Draker & other data monitoring packages.

SAFETY

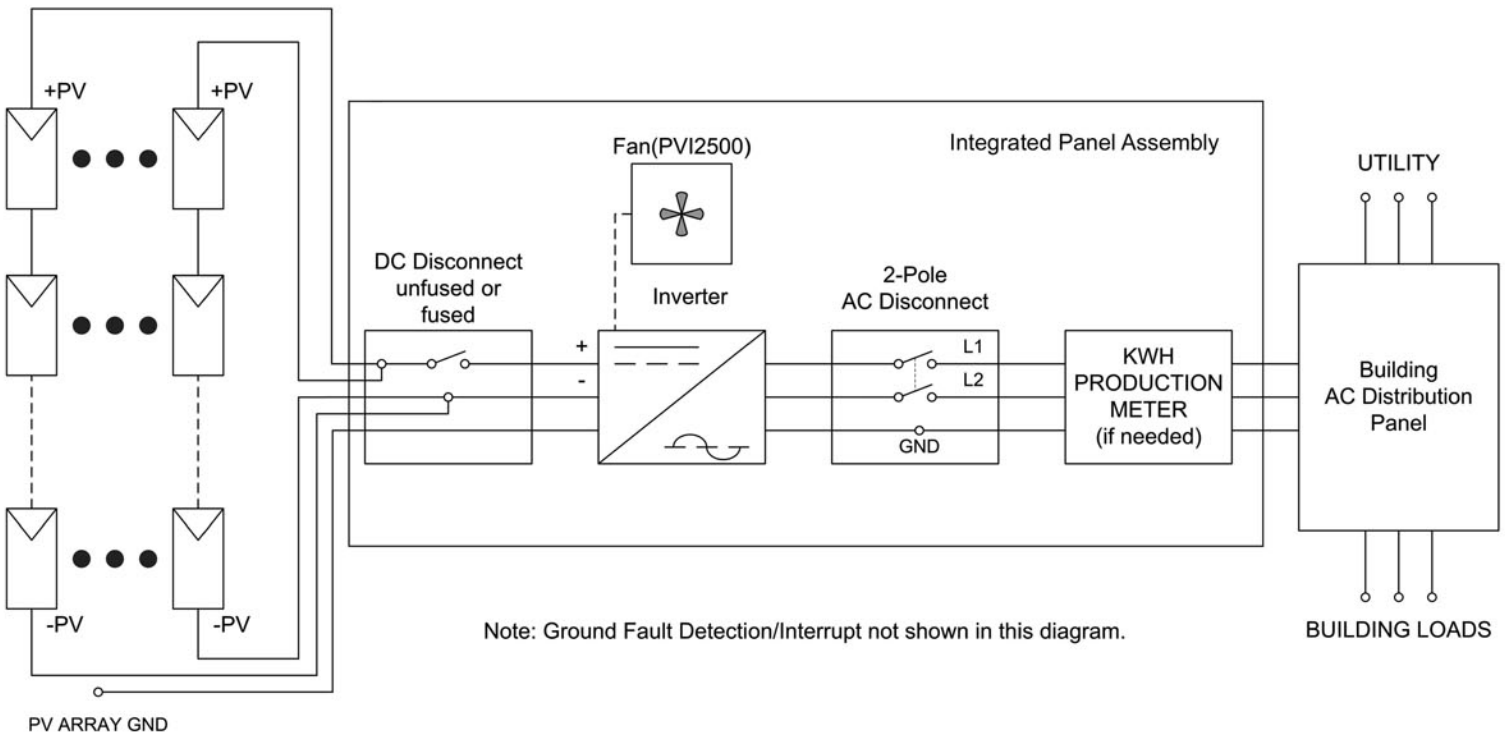
The PVI 1800/PVI 2500 has been tested to the latest UL 1741 and IEEE std 1547 standards and meets all the requirements. An important selling point of this inverter is the galvanic isolation, which increases both reliability and safety.

HIGH THERMAL PERFORMANCE

All aluminium construction and high efficiency design provides full rated power in ambient temperatures up to 130°F (55°C). No derating will occur!



PVI 1800 and PVI 2500 PV SYSTEM BLOCK DIAGRAM



proven history, sustainable future

Solectria Renewables designs and manufactures power electronics for renewable power generation systems. Feature-packed and highly integrated, the products lead the industry in installation ease and total value. At the heart of Solectria's products are its reliable and efficient core inverters, which have been proven over the past 20 years in the extremely harsh environment of truck, bus and military transportation applications. Solectria Renewables is run by the renowned MIT engineers who founded the Solectria brand in 1989. With a customer-focused team, high quality suppliers and a best practices manufacturing process, Solectria is committed to your success.



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Background: 3.1 kW solar array using PVI 2500 inverter. Right: Happy PVI 1800 customer, Harvest Solar.
Left: Lightweight for easy installation. Center: 30 kW condo installation with 11 PVI 2500 integrated panel assemblies by CSG.