

# SOLARBRIDGE PANTHEON™ MICROINVERTER



- 25-YEAR WARRANTY
- HIGHEST ENERGY HARVEST
- LOWEST INSTALLATION AND OPERATING COSTS
- SAFEST SOLUTION

## AC Modules with SolarBridge Pantheon Microinverters

Solar modules that produce grid-compatible AC power have been a long-sought goal of the PV industry. The limitations of traditional PV systems with series-wired DC modules and failure-prone central inverters have held solar back from its full performance potential, and made rooftop solar impractical or unsuitable for up to 50 percent of sites.

Until now. The SolarBridge Pantheon™ microinverter enables a game-changing solar solution: highly reliable, integrated AC modules that dramatically improve system reliability, increase energy harvest and simplify installation to deliver the lowest leveled cost of energy. Welcome to a new era of solar. Welcome to the era of AC modules.

## Market-Expanding

The SolarBridge AC Module System comprises the SolarBridge Pantheon as well as the SolarBridge Power Manager and SolarBridge Power Portal for onsite or remote management of a PV system. The entire solution enables module manufacturers to provide greater value to their network of dealers and installers by offering AC modules with factory-integrated microinverter technology.

AC modules powered by SolarBridge enable manufacturers to overcome the limitations of traditional DC modules and deliver a differentiated AC solution that expands their market and grows their bottom line. Sites with varied layouts or partial shading can now be viable for solar. Customers with limited space or budget can now consider solar because of the inherent flexibility of AC systems.

Working with SolarBridge, module manufacturers can now participate in the inverter revenue stream, reversing the trend of declining ASPs and further increasing sales.

## Reliable by Design

The SolarBridge Pantheon's ultra-reliable design protects a module manufacturer's hard-won reputation for quality by supporting a 25-year warranty on the complete AC module. Its patented architecture utilizes highly reliable film capacitors instead of failure-prone components such as electrolytic capacitors, tantalum capacitors and optoisolators. The SolarBridge Pantheon has undergone rigorous reliability testing – both independently and as part of an AC module – exceeding standard certification requirements to ensure its performance over the full operating life of a PV array.

## Highest Energy Harvest

Through module-level maximum power point tracking (MPPT), the SolarBridge Pantheon optimizes the output of each solar panel. By minimizing energy losses due to variable shading, module mismatch and soiling, AC modules with SolarBridge Pantheon microinverters produce up to 25 percent more energy per site than alternative systems.

## Lowest Installation and Operating Costs

Ready to produce grid-compatible power straight from the factory, AC modules with integrated SolarBridge Pantheon microinverters reduce installation time by 20 percent or more. With no separate inverter or DC components to install, AC modules are the simplest and most flexible solution for rooftop PV installations. Eliminating the need for costly inverter replacements, the Pantheon reduces ongoing costs by a full 25 percent over conventional inverter solutions.

## Safest Solution

In addition to energy harvest and installation cost benefits, AC modules also have advantages in safety over DC-based PV systems. With no high-voltage DC cables to install and no accessible DC wiring, AC modules are inherently safer to handle than DC modules and do not have the same potential for arc faults which is critical for fire prevention and rescue worker safety.



## SPECIFICATIONS

	P235LV-240	P235HV-240
<b>INPUT DATA (DC)</b>		
Maximum Input Power (W)	250	250
Maximum continuous input power (W)	235	235
Maximum input voltage	48	64
MPPT voltage (V)	18-36	25-50
Maximum DC short circuit current (A)	14	14
Maximum input current (A)	11.25	8
<b>OUTPUT DATA (AC)</b>		
Maximum continuous output power (W)	225	
Nominal output current (A)	0.9375	
Nominal voltage (V)	240	
Operating voltage range (V)	211-264	
Nominal frequency (Hz)	60	
Operating freq range (Hz)	59.3 - 60.5	
Power factor	>0.99	
Total harmonic distortion	< 5%	
Maximum units per 20A branch	17	
<b>EFFICIENCY</b>		
Peak inverter efficiency	95.5%	
CEC weighted efficiency	94.5%	
Nominal MPP tracking	99.6%	
<b>MECHANICAL DATA</b>		
Operating ambient temp range	-40C to +65C	
Night time power consumption (tare)	<30mW	
Dimensions (W x H x D)	8" x 6.5" x 1.25"	
Weight	4.5 lbs	
Cooling	Natural Convection - No Fans	
Enclosure environmental rating	Outdoor — Tested to UL 1703, meets NEMA 6	
<b>FEATURES</b>		
Communication	Powerline Carrier	
Warranty	25 years	
Compliance	FCC Part 15 Class B UL 1741 / CSA 107.1	

**SOLARBRIDGE**  
TECHNOLOGIES™  
solarbridgetech.com

MAIN 512-637-6860 TOLL-FREE 877-848-0708  
FAX 512-637-6878  
9229 Waterford Centre Blvd., Suite 110  
Austin, TX 78758 USA

