GE Energy

■ Get Connected with Brilliance™ Grid Tie Solar Inverters

Brilliance™ Inverters make installation efficient, easy, and affordable

GE Energy's Brilliance™ Inverters offer a family of grid tie solar inverters designed with the knowledge and expertise of renewable energy dealers and installers. The result is a high performance series of inverters that makes utility interactive installations easy and cost effective. GE Energy's Brilliance™ high performance photovoltaic (PV) string inverters offer high efficiency, low installed cost, clean design and high reliability. The Brilliance™ series includes high quality inverters that offer the best price versus performance in the industry backed with a GE 10 year warranty.

High performance string inverters

- Peak and average efficiency greater than 94% maximizes your PV investment
- Fast MPPT algorithm ensures maximum energy harvest from your array under any conditions
- Excellent thermal performance provides full rated power up to 140°F (40°C)
- FCC Part B compliance means less potential interference with communication, radio, and consumer electronics

Easy and inexpensive to install

- Includes integrated lockable AC/DC disconnect that is NEC compliant as a DC disconnect
- Includes a lightweight and versatile mounting bracket that simplifies installation
- Offers wide MPPT PV module input voltage range to make module selection and string sizing externely flexible



Advanced modular design

- Modular design allows Brilliance™ Grid Tie Inverters with the same or different power levels to be mounted side-by-side using the wiring box as a wiring raceway
- Easy access PV and utility terminal block simplifies wiring
- Wiring box can be separated from the sealed inverter enclosure allowing DC/AC connections to remain intact in the unlikely event that the inverters need to be serviced
- Rugged NEMA3R inverter enclosure allows reliable outdoor and indoor installations

Full feature inverter display and communications available day or night

- Includes Liquid Crystal Display (LCD) providing instantaneous power, daily and lifetime energy production PV array voltage and current utility voltage and frequency, time online "selling" today, and fault messages.
- LCD vibration sensor allows the tap of a finger to turn backlight on and display screen cycling
- Bright LED indicators provide system status at a glance
- Integrated RS232 and communications bus RJ45 communication ports

Certifications

Brilliance™ Inverters meet the following requirements:





GE Energy Brilliance™ Grid Tie Solar Inverter

Electrical Specifications

Models	GEPVb-2800-NA-240/208		GEPVb-3300-NA-240/208		GEPVb-4000-NA-240/208		GEPVb-5000-NA-240/208	
Maximum AC power output	2800 W	2700 W	3300 W	3100 W	4000 W	3800 W	5000 W	4500 W
AC output voltage (nominal)	240 VAC	208 VAC						
AC output voltage range	211-264 VAC 183-229 VAC							
AC frequency (nominal)	60 Hz		60 Hz		60 Hz		60 Hz	
AC frequency range	59.3-60.5 Hz		59.3-60.5 Hz		59.3-60.5 Hz		59.3-60.5 Hz	
Maximum continuous output current	11.7 A	13.0 A	13.8 A	14.9 A	16.7 A	18.3 A	21 A	22 A
Current THD	<5%		<5%		<3%		<3%	
Power factor	>0.95		>0.95		>0.95		>0.95	
DC input voltage range	195-600 VDC		195-600 VDC		195-600 VDC		235-600 VDC	
Peak power tracking voltage range	195-550 VDC		200-400 VDC		240-480 VDC		240-550 VDC	
Peak inverter efficiency	95.00%	94.60%	95.90%	95.60%	96.00%	95.70%	95.90%	95.50%
CEC efficiency	94.00%	93.50%	95.50%	95.00%	95.50%	95.00%	95.50%	95.00%
Night time power consumption	1 W		1 W		1 W		1 W	
Output overcurrent protection	15 A		20 A		20 A		30 A	

Mechanical Specifications

Operating temperature range -13° F to $+149^{\circ}$ F (-25°C to $+65^{\circ}$ C)

Enclosure type NEMA3R (outdoor rated)

Unit weight 49.0 lbs (22.2 kg) to 51.0 lbs (23.1 kg)

Shipping weight 57.0 lbs (25.9 kg) to 59.0 (26.8 kg)

Shipping dimensions (H × W × D) 34.1 × 20.4 × 10.3" (86.6 × 51.8 × 26.2 cm)

Inverter dimentions (H × W × D) 28.5 × 15.9 × 5.7" (75.5 × 40.3 × 14.6 cm)

Mounting Wall mount (mounting braket included)

Features

PV/Utility disconnect	Eliminates need for external PV (DC) disconnect. Complies with NEC requirements.
Cooling	Convection cooled, fan not required.
Display	Backlit 2-line 16-character liquid crystal display provides instantaneous power, daily and lifetime energy productions, PV array voltage and current, utility voltage and frequency, time online "selling" today, fault messages, and installer customizable screens.
Communications	One RS 232 and two communications bus RJ45 ports.
Wiring box	PV, utility, ground, and communications connections. The inverter can be separated from the wiring box.
Warranty	10-year standard.



For more information about GE Energy's BrillianceTM Grid Tie Solar Inverters, visit www.ge-energy.com/solar.

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