

PULSAR

Off-grid solar inverter

Seriously committed to minimizing the carbon footprint on the planet, Forza® is leading the energy transformation with the introduction of its innovative line of solar inverters.

By integrating cutting-edge digital, power electronics and photovoltaic technologies, the brand has built a convenient, reliable and highly-efficient solution centered on the generation, storage and supply of clean energy virtually anywhere it's needed. Thanks to the compact size and dependable architecture of the inverters, they can be equally deployed at the center of an urban hub or in a remote location with no access to the electric grid, or where the construction of any utility extension can be costly or even structurally unfeasible.

Our PULSAR line is made up of inverters designed for off-grid, single-phase photovoltaic applications. Equipped with an MPPT charger, the PULSAR optimizes energy harvesting while reducing maintenance and operational costs. As the inverter has been conceived to easily integrate with the Forza battery and the embedded application, it provides seamless status monitoring along with remote management, all in real-time.

Highlights

- Pure sine wave solar inverter
- Highly-efficient MPPT (Maximum Power Point Tracking) charge controller
- Features restart functionality, including the "cold start" option from battery
- Wide DC input range
- USB On-the Go functionality for easy data transfer to and from the unit
- Selectable input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority via LCD
- Rugged design with overload, overtemperature, and short-circuit protection
- Smart battery charger design for optimized battery performance

Available in the 120 and 220-volt versions, and with capacities of 1000W, 2000W, 3000W and 5000W, the **PULSAR** characterized for its sturdy construction, outstanding performance and industry-grade design life.



Off-grid



MPPT
charger



Fully
protected



LCD
screen

MPN	FIO-P11K12
General	
Inverter type	Off-grid
Phase	Single phase
Rated power	1000VA/1000W
Input	
Nominal voltage	120VAC
Voltage range	65-140VAC
Frequency range	50/60Hz (autosensing) ± 4Hz
Power factor	≥0.98 at 100% load
Output	
Nominal voltage	120VAC ± 5%
Surge power	2000VA
Frequency (battery mode)	50Hz ± 0.1Hz or 60Hz ± 0.1Hz
Harmonic distortion	≤5% THD (linear load) / ≤10% THD (non-linear load)
Transfer time (line to battery)	<10ms
Efficiency (AC mode)	98%
Efficiency (battery mode)	90%
Waveform	Pure sine wave
Battery	
Battery voltage	12VDC
Floating charge voltage	13.5VDC
Overcharge protection	15.5VDC
Solar and AC charger	
Solar charger type	MPPT
Number of MPP trackers	1
Maximum PV array power	500W
Maximum PV array open circuit voltage (V _{oc})	102VDC
Operating voltage (VMP)	15-80VDC
Maximum solar charge current	40A
Maximum AC charge current	20A
Maximum charging power	60A
Standby power consumption	30W
Special features	
Power-up function	Cold start and auto-restart
Communication	USB, RS232, dry contact / USB, dry contact / Optional Wi-Fi and SNMP modules
Cooling	Controlled forced ventilation, variable fan speed
Protection	Overload, short-circuit, overtemperature and overcharge
Environment	
Operating temperature	14°F-122°F
Storage temperature	-5°F-140°F
Relative humidity	5%-95% non-condensing
Operating altitude	<5000m with a 1% output derate every 100m above 1500m, up to 5000m
Audible noise	<60dB at 1 meter
Physical appearance	
Power switch	Push button
Housing	Metal
Color	White and black
Dimensions (LxHxD)	10.7x13.9x5in
Weight	15.4lb
Additional information	
Certification	CE
Warranty	2 years