

# PURE SINE-WAVE INVERTER - PS-3000-12-120



HDM's PS-3000-12-120 Pure Sine-Wave Inverter provides a superior AC source for your complex electrical and frequency sensitive equipment. It provides up to 3000W of continuous AC power for mobile and stationary applications such as satellite communication equipment, digital surveillance cameras, portable computers, and emergency medical equipment. Compact and ruggedized design, the PS-3000-12-120 inverter will ensure a clean and low distortion AC power at sea and on the road.



ELECTRICAL	
DC Input Nominal Voltage	12V <sub>DC</sub>
DC Input Voltage Range	11 ~ 15V <sub>DC</sub>
DC Input Under Voltage Lockout	< 10.5V <sub>DC</sub>
DC Input Over Voltage Protection	> 15.5V <sub>DC</sub>
No Load Current Draw	
ON state	2.5 ~ 5A <sub>DC</sub> @ 12V <sub>DC</sub>
Sleep Mode	< 0.2A <sub>DC</sub> @ 12V <sub>DC</sub>
AC Output Power	3000W
AC Output Surge Rating	6000W
AC Output Waveform	Pure Sine-Wave
AC Output Voltage	120V <sub>AC</sub>
AC Output Frequency	60(±0.5)Hz
AC Output Voltage Regulation	±2% V <sub>out</sub>
Distortion (THD)	< 3%
High Temperature Shutdown	≥ +85(±5)°C (Internal Threshold)
High Temperature Auto-Recovery	+60(±5)°C (Internal Reset)
Sleep Mode	I <sub>out</sub> < 1A <sub>AC</sub> for > 6 hours
Efficiency	90% Typ
Isolation (Input-Output)	1500V <sub>AC</sub>
Battery Type	AGM, Flooded Lead Acid Batteries
MECHANICAL	
Dimensions (LxWxH")	16.3 x 8.8 x 9.6"
Weight	37 lbs
Construction	Extruded Aluminum Case
INTERFACE	
DC Input Connection	(2) 3/8-16 Stud Terminals
AC Output Connection	12" 10AWG/3C with Delphi 15344628 Pin Plug
Remote Connection	12" 18AWG/6C with Deutsch DT06-6S Socket Plug
Display And Control	60" 18AWG/6C with Deutsch DT04-6P Pin Receptacle
Data I/O Port	n/a
ENVIRONMENTAL	
Cooling	Front Side Mounted External Waterproof Fan
Operating Temperature	-40 ~ +65°C <sup>1</sup>
Storage Temperature	-40 ~ +85°C
MTBF Prediction <sup>2</sup>	227,000 Hrs

## Industry-Leading Features

- High Power Density
- High Surge Capability
- Best Thermal Performance
- Watertight Standard Design
- Sleep Mode to Minimize Idling Drain Current (0.2A<sub>DC</sub> vs 3~5A<sub>DC</sub>)
- Multi-Stage Output Short Circuit Protection
- Load Dump and Voltage Transient Protection
- RS232 or CAN-Bus Interface (Optional)

## Operational & Protection Features

- Input Reverse Polarity Protection<sup>3</sup>
- Input Low Voltage Shutdown
- Input Overvoltage Shutdown
- Output Over-Current Protection
- Output Short Circuit Protection
- Output Overvoltage Protection
- High Temperature Shutdown
- Auto-Recovery Function
- Sleep Mode

## Applicable Performance Requirements

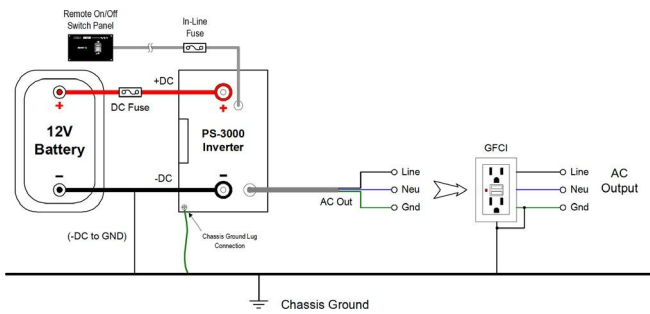
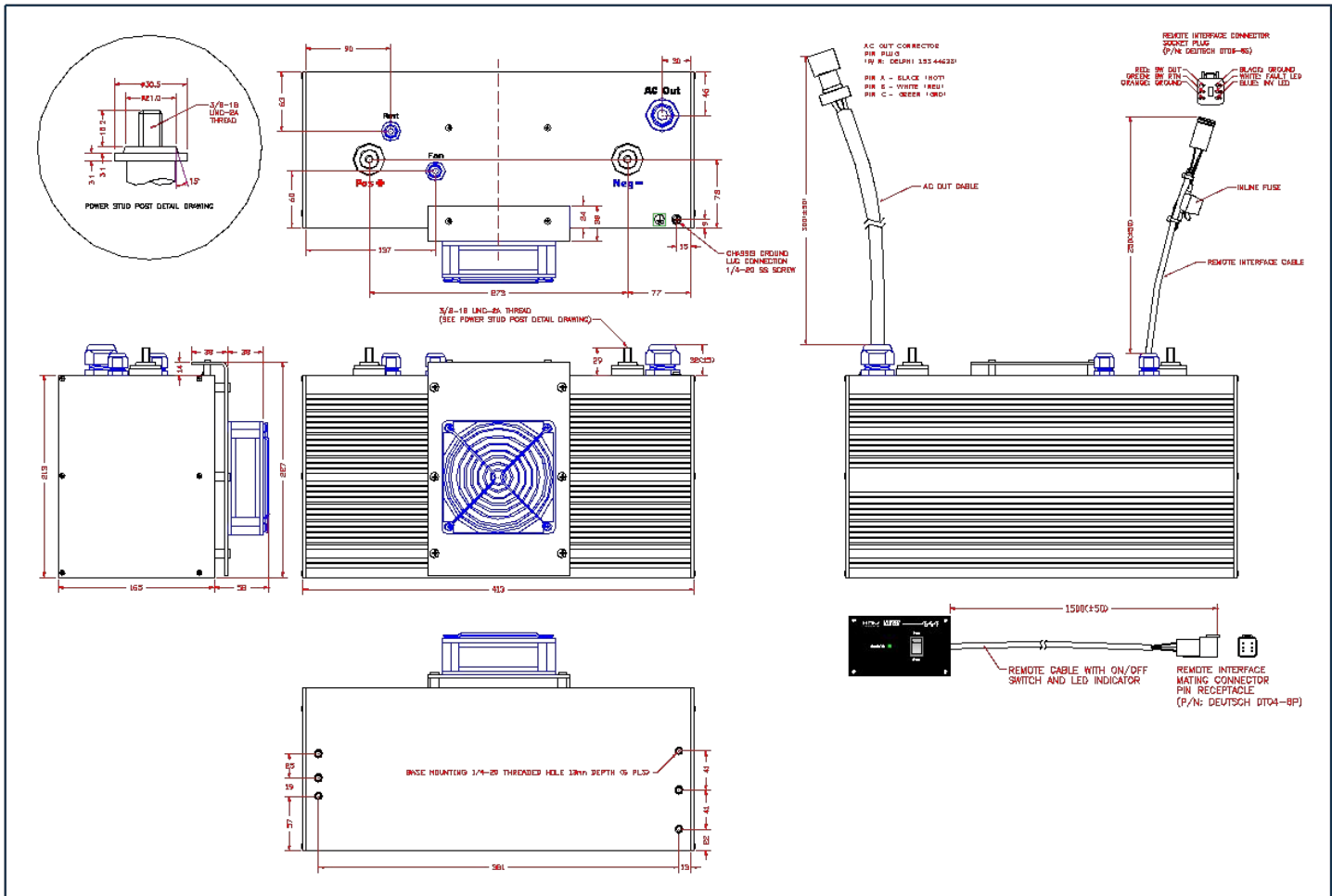
- Ruggedization For SAE J1455 Chassis Mount Components
- Compliancy For ISO 7637-2 Electrical Transient

Specifications typical at 25°C unless otherwise stated and are subject to change without notice.

1. Rated output power for PS-3000-12-120 will derate above +55°C ambient temperature.
2. Calculated per Bellcore TR-NWT-000332 method at 50% stress, +40°C. Products are covered by 1 year limited warranty.
3. External DC input fuse required.



## Pure Sine-Wave Inverter Diagram



Connection Block Diagram for PS-3000-12-120

MODEL	
PS-3000-12-120	
OUTPUT POWER	
3,000W	
SURGE POWER	
6,000W	
INPUT/OUTPUT VOLTAGE	
12V <sub>DC</sub> / 120V <sub>AC</sub>	
Add suffix after model name for optional accessories.	
-RS	RS232 Interface
-CAN	CAN-Bus Interface