



IPSi1205
INTELLIGENT 1200W PURE SINE INVERTER

The IPSi1205 Series Intelligent Pure Sinewave Inverters are designed for powering sensitive AC loads in harsh environment applications.

Internally, the IPSi1205 is controlled by a sophisticated Digital Signal Processor (DSP) for optimal control and efficient operation. Power MOSFET transistors and a heavy-duty toroidal power transformer produce stepped up AC voltage from the input DC. Additional filtering on the AC output reduces EMI noise that can interfere with sensitive communication equipment.

For safety, this unit features a low voltage warning with shutdown circuitry to protect the DC power source. The inverter is also safeguarded by high voltage and over-temperature protection with shutdown circuitry. All alarm conditions can be monitored on the bright LED indicator display and mirrored on the optional remote control panel (control panel coming soon, contact Sales for more details).

With the optional InverterWizard software, additional inverter settings can be adjusted using any Windows laptop via the inverter's MicroUSB port. InverterWizard allows for adjustment of output frequency, output voltage, and alarm shutdown parameters, as well as monitoring and logging operating data.



FEATURES

- Overload protection
- Short-circuit protection
- Overtemperature protection
- Optional ground fault protection
- Bright LED indicators
- DSP controlled
- Programmable output voltage and frequency
- AC Input, Line AC Detect & Autoswitch UPS

AVAILABLE MODELS

DC Input

12VDC
24, 28, 32 or 36VDC
48 or 72VDC

AC Output

120VAC
240VAC
230VAC



5 YEAR WARRANTY



TECHNICAL SPECIFICATIONS

DC Input	-12	-20	-40
Nominal Voltage	12VDC	24, 28, 32 or 36VDC	48 or 72VDC
Actual Voltage	10.5 to 18VDC	20 to 45VDC	39 to 86VDC
Maximum Current	160A	80A	40A
Recommended Fuse	250A	125A	70A
Low Voltage Input Shutdown Range	10.5VDC (user selectable: 10.5 to 14VDC)	21VDC (user selectable: 19 to 36VDC)	40VDC (user selectable: 39 to 70VDC)
Low Voltage Input Startup Range	11.5VDC (user selectable: 11 to 14VDC)	23VDC (user selectable: 20 to 36VDC)	44VDC (user selectable: 40 to 70VDC)
Low Voltage Input Shutdown Delay	5s (user selectable: 1 to 120s)	5s (user selectable: 1 to 120s)	5s (user selectable: 1 to 120s)
High Voltage Input Shutdown	19VDC	49VDC	88VDC

AC Input			
Voltage Switchover	110VAC (user selectable: 90 to 140VAC)	220VAC (user selectable: 180 to 240VAC)	210VAC (user selectable: 180 to 240VAC)
Continuous Current	10A		
Switchover Delay	30s (user selectable: 5 to 120s)		
Transfer Time	15ms (inverter to line), 36ms (line to inverter)		

AC Output	-120	-240	-230
Nominal Voltage	120VAC	240VAC	230VAC
Voltage Range	100 to 120VAC	200 to 240VAC	200 to 240VAC
Power Phase	Single	Split	Single
Default Frequency	60Hz \pm 0.01Hz	60Hz \pm 0.01Hz	50Hz \pm 0.01Hz
Frequency Range	user selectable: 50 or 60Hz		
Continuous Current	10A	5A	5A
Peak Current	12A	6A	6A
Surge Current	20A	10A	10A
Output Breaker	10A	10A	10A
Regulation (Line & Load)	< \pm 2.0VAC	< \pm 3.0VAC	< \pm 3.0VAC
Output Distortion	< 2% at full load (resistive load)		
Duty Cycle	Continuous: 24 hours per day		
Efficiency	> 85% @ maximum output		
Ground Fault Trip Current	4 to 6mA (with Option G)		

TECHNICAL SPECIFICATIONS

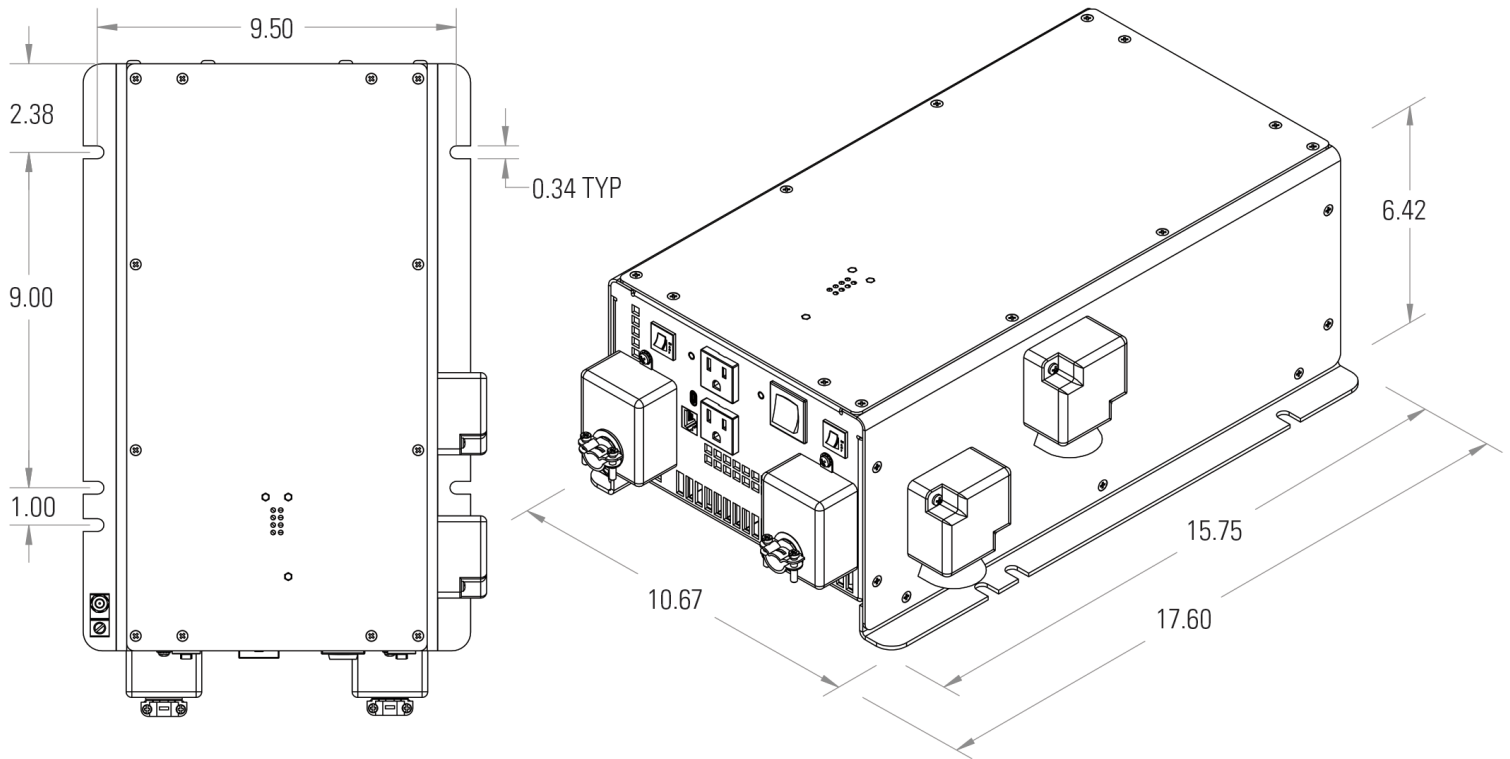


Figure 1. IPSi1205 top and isometric view with dimensions in inches.
Unit may not be exactly as shown.

STEP model available upon request.

Mechanical

Length	17.6in. / 44.7cm	
Width	10.67in. / 27.1cm	
Height	6.42in. / 16.3cm	
Weight	40.5lb / 18.4kg (estimated)	
Encasement Material and Finish	Marine grade aluminum, with a stainless steel baseplate Powder coated chromate	
Mounting	Horizontal or vertical	
Clearance	1.0in. / 2.5cm (each side and above)	
DC Input Connections	2x M8 Stud	
AC Input Connections	1x Phoenix VDFK-4 terminal block	
AC Output Connections	2x TBD (standard electrical code wall sockets)	1x Phoenix VDFK-4 terminal block
Other Connections	Data/Communications: MicroUSB port	Remote Control: RJ45 connector with proprietary pinout

TECHNICAL SPECIFICATIONS

Pinouts

J1, J2 - DC Input	
2x M8 Stud	
Stud	Description
J1	DC-
J2	DC+

J3, J4 - AC Output	
2x TBD (standard electrical code wall sockets)	

J5 AC Output	
1x Phoenix VDFK-4 terminal block	
Pin	Description
A	Neutral
B	Ground
C	Line

J6 - AC Input	
1x Phoenix VDFK-4 terminal block	
Pin	Description
A	Neutral
B	Ground
C	Line

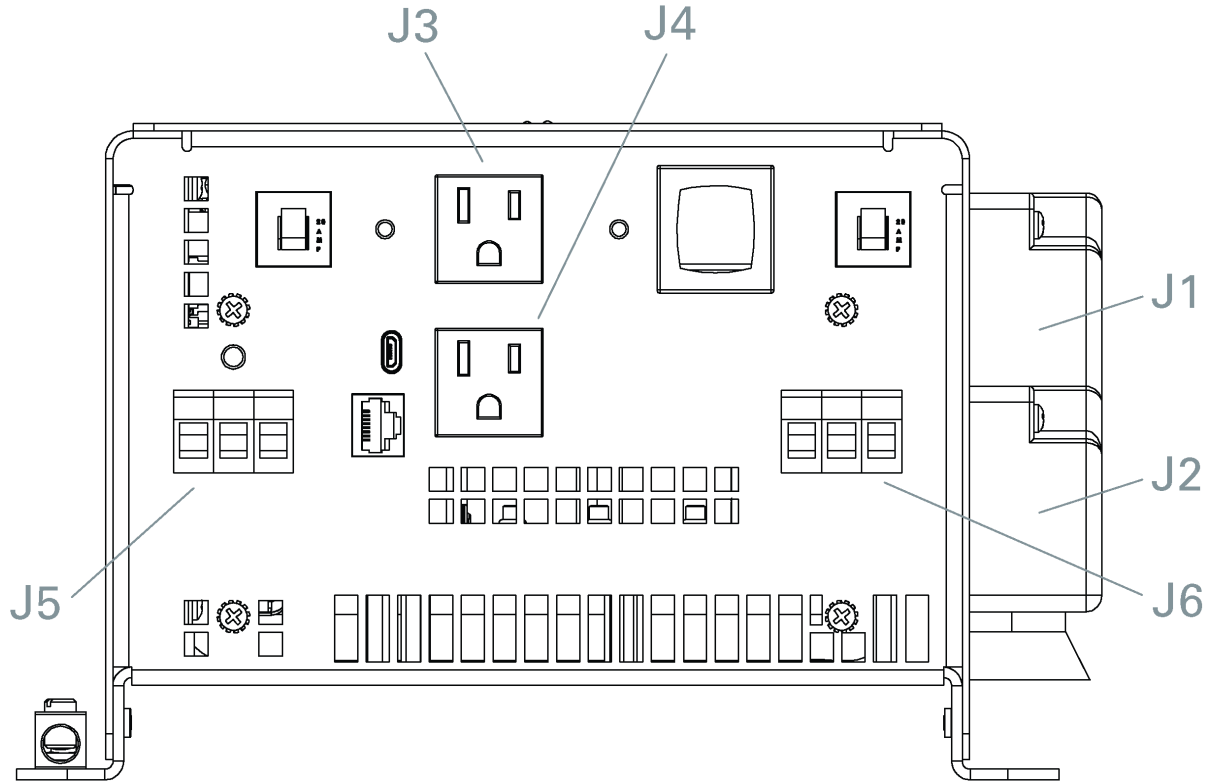


Figure 2. IPSi1205 front view with connector pinouts. Covers for J5 and J6 not shown. Unit may not be exactly as shown.

Environmental and Safety

Operating Temperature	-20°C to +40°C @ maximum output (Optional -40°C to +55°C wide temperature range available)
Storage Temperature	-20°C to +80°C
Humidity	0 to 95% relative humidity (non-condensing)
Packaging	Vented chassis
Isolation	DC Input to AC Output > 2000VDC
Mean Time Between Failures	> 10 Years
Warranty	Two years parts and labor
Emissions	Complies with FCC Class B
Environment	Indoors
Safety	Designed to meet FCC Class B, Part 15

ORDERING INFORMATION

INVERTERS

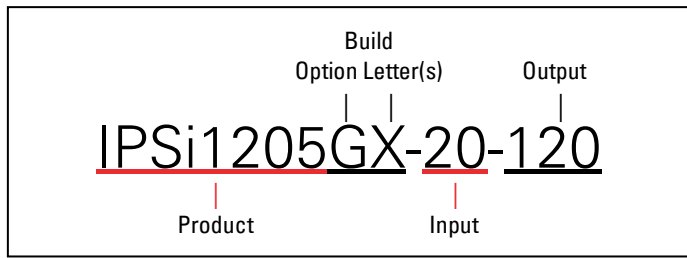


Figure 3. Example model number for an IPSi1205 Intelligent Pure Sine Inverter.

Model Naming

Product	IPSi1205
Additional Build Options	G, X
Additional Line Options	U
DC Input Voltage	-12, -20, -40
AC Output Voltage	-120, -240, -230

Not all combinations make valid part numbers.
Please contact Sales for availability.

Build Options

Option G:	Ground Fault Circuit Interrupter (GFCI) enabled
Option X:	Basic ruggedization and -40°C to +55°C wide temperature operating range

Line Item Options

Option U:	Factory inspected to meet CSA SPE-1000
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