



IPSi365
INTELLIGENT 360VA PURE SINE INVERTER

The IPSi365 is a high performance, low frequency DC/AC inverter designed for mobile and industrial applications. Designed and built to provide high-quality pure sine AC power for sensitive equipment in a compact package.

Due to its topology the inverter features exceptionally low EMI on the input and output. The unit features programmable low input voltage shutdown and delay, as well as a programmable output voltage and frequency.

Built for safety, this unit features a low voltage warning with shutdown circuitry to protect the DC power source. The inverter is safeguarded by high voltage and over-temperature protection with shutdown circuitry. All alarm conditions can be monitored on the bright LED indicator display and the optional remote control panel. Built-in ground fault protection (with Option G) helps ensure the safety of personnel and the protection of connected equipment.

With the downloadable InverterWizard software, you can adjust additional settings using any Windows laptop or PC via the inverter's MicroUSB port. InverterWizard allows adjustment of output voltage, output frequency, and alarm shutdown parameters, as well as monitoring and logging operating data.



FEATURES

- Overload protection
- Overtemperature protection
- Output short-circuit protection
- Output overvoltage protection
- Tough and durable
- Bright LED indicators
- Programmable output voltage and frequency
- Extremely low EMI
- Optional ground fault protection

AVAILABLE MODELS

DC Input

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

AC Output

120VAC 50/60Hz
230VAC 50/60Hz

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 18.5VDC	19 to 53VDC	39 to 83VDC
Maximum Current	46A	25A	12A
Recommended Fuse	2x 30A 32VDC Blade Mini Fuses	1x 30A 58VDC Blade Mini Fuse	1x MDA - 15A Fuse
Low Voltage Input Shutdown	10.5VDC (user selectable: 10.5 to 14VDC)	19VDC (user selectable: 19 to 36VDC)	50VDC (user selectable: 39 to 70VDC)
Low Voltage Input Startup	11VDC (user selectable: 11 to 14VDC)	20VDC (user selectable: 20 to 36VDC)	53VDC (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	18.5VDC	53VDC	83VDC
Inrush Current (from fully discharged)	1.8A peak	4.8A peak	8.4A peak

AC Output	-120	-230
Nominal Voltage	120VAC (user selectable: 100 to 120VAC)	230VAC (user selectable: 200 to 240VAC)
Default Frequency	60Hz \pm 0.01Hz	50Hz \pm 0.01Hz
Frequency Range	user selectable: 50 or 60Hz	
Power Phase	Single	
Continuous Current	3.0A	1.5A
Peak Current	3.6A	1.8A
Surge Current	7.2A	3.6A
Regulation (Line & Load)	< \pm 2.0VAC	< \pm 3.0VAC
Output Distortion	< 2% at full load (resistive load)	
Duty Cycle	Continuous: 24 hours per day	Peak: 10 minutes per hour
Efficiency	> 85% @ maximum output	
Ground Fault Trip Current	4 to 6mA (with Option G)	

AC Input (With Option A)

Voltage Switchover	110VAC (user selectable: 90 to 140VAC)	220VAC (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)	

TECHNICAL SPECIFICATIONS

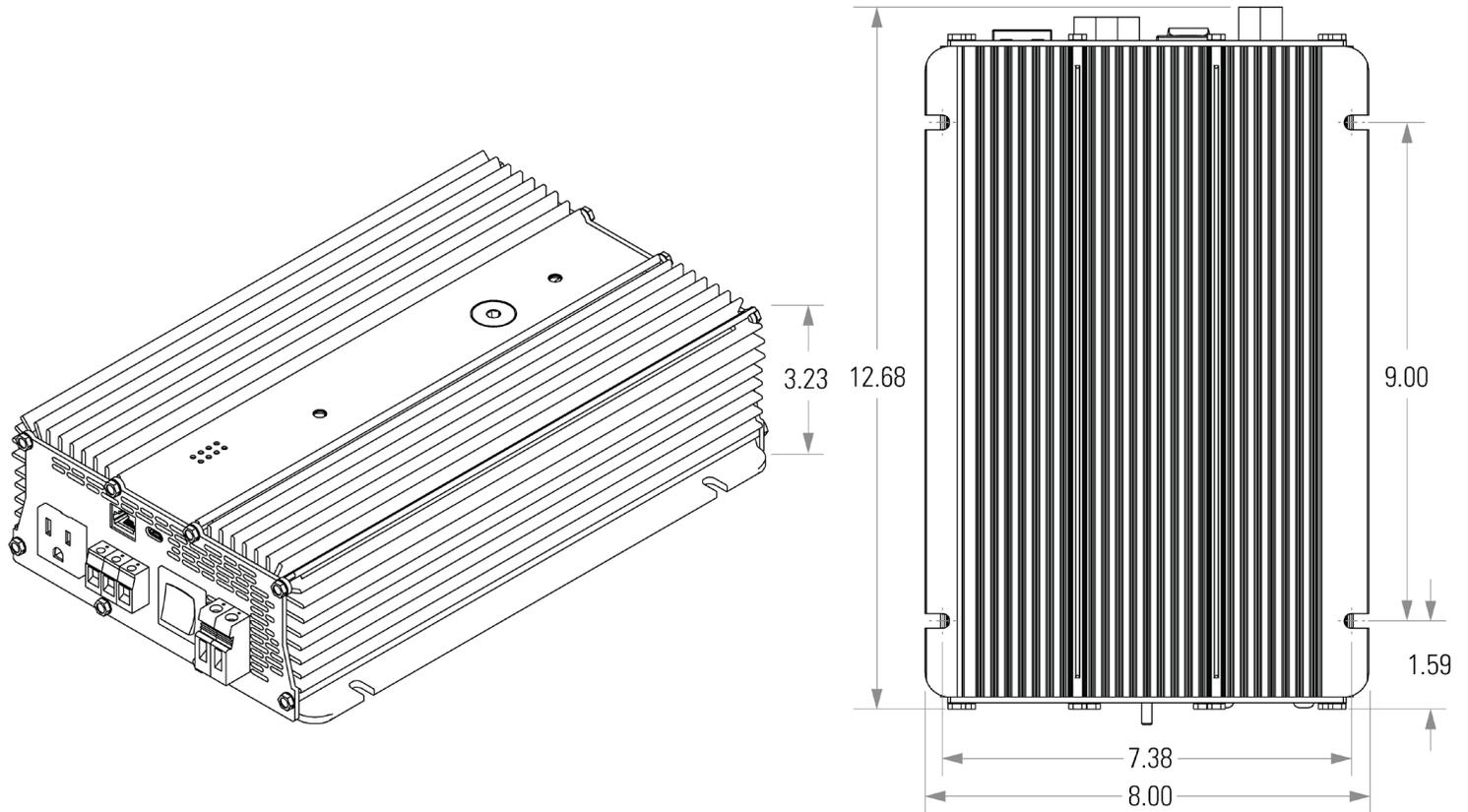


Figure 1. IPSi365 isometric and bottom view with dimensions in inches.
Optional features included. Unit may not be exactly as shown.

STEP model available upon request.

Mechanical

Length	13.0in. / 33.0cm
Width	8.0in. / 20.3cm
Height	3.2in. / 8.2cm
Weight	16.0lb / 7.3kg (estimated)
Encasement Material and Finish	Marine grade black anodized aluminum
Mounting	Horizontal or vertical
Clearance	1.0in. / 2.5cm (each side and above)
DC Input Connections	1x Phoenix VDFK6 50 A / 300V
AC Output Connections	1x Phoenix VDFK4 32A / 500V
AC Input Connections	1x Phoenix VDFK4 32A / 500V (with Option A)
Other Connections	Communications: MicroUSB port Remote Control: RJ45 connector with proprietary pinout

TECHNICAL SPECIFICATIONS

Pinouts

J1 - DC Input	
1x Phoenix VDFK6 50 Amp/300V	
Pin	Description
J1	DC+
J2	DC-

J2 - AC Output	
1x Phoenix VDFK4 32 Amp/500V	
Pin	Description
A	Line
B	Neutral
C	Ground

J2 - AC Input (Option A)	
1x Phoenix VDFK4 32 Amp/500V	
Pin	Description
A	Line
B	Neutral
C	Ground

J3 - AC Output (110VAC American model)	
1x NEMA 5-15R	
Pin	Description
A	Line
B	Neutral
C	Ground

J3 - AC Output (220 VAC American model)	
1x NEMA 6-15/20R	
Pin	Description
A	Line
B	Neutral
C	Ground

J3 - AC Output (220VAC Worldwide model)	
1x 220V Universal receptacle	
Pin	Description
A	Line
B	Neutral
C	Ground

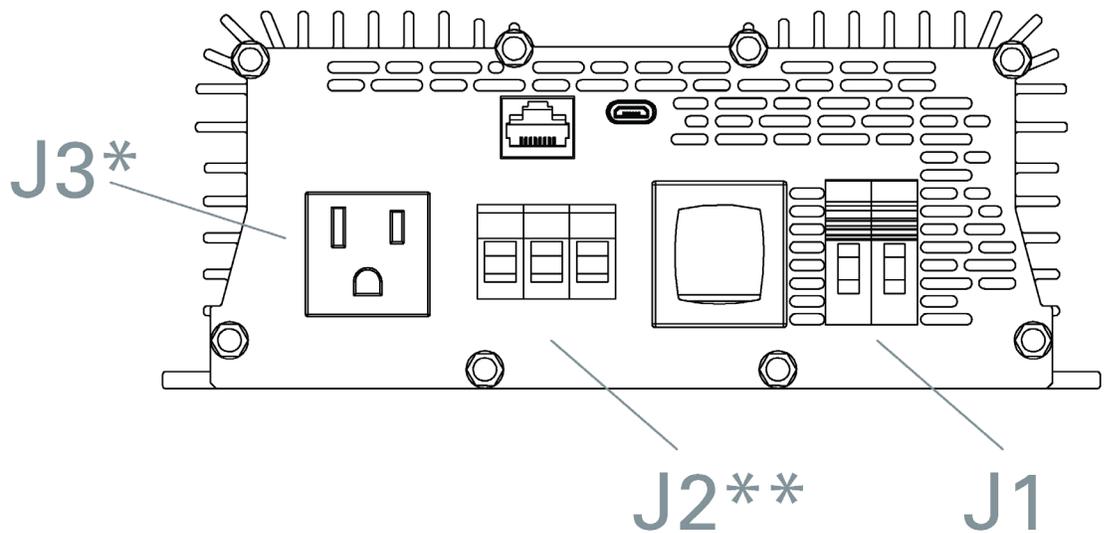
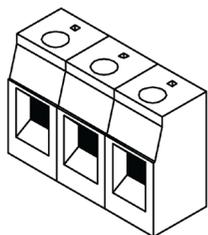


Figure 2. IPSi365 front view with pinouts. Optional features included. Unit may not be exactly as shown.

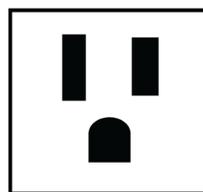
*NOTE: J3 can be replaced with any receptacle shown in Figure 3.
 **NOTE: With Option A, AC Output (J2) is replaced by AC Input (J2) with the same connector.

Environmental and Safety

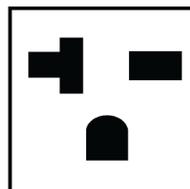
Operating Temperature	-25°C to +40°C @ maximum output
Storage Temperature	-20°C to +80°C
Humidity	0 to 95% relative humidity (non-condensing)
Packaging	Vented chassis
Isolation	DC Input to AC Output > 2000VDC
Typical Service Life	> 10 Years
Warranty	Five years parts and labor
Emissions	Complies with FCC Class B
Environment	Indoors
Safety	Designed to meet UL 458, CSA 22.2 107.1, and FCC Class B, Part 15
Audible Noise	< 27dB @ 3 ft (1m) with fan running



Panel feed-through terminal block



North American 120VAC



North American 220VAC



Worldwide 220VAC

Figure 3. J3 AC Output receptacle options.

ORDERING INFORMATION

INVERTERS

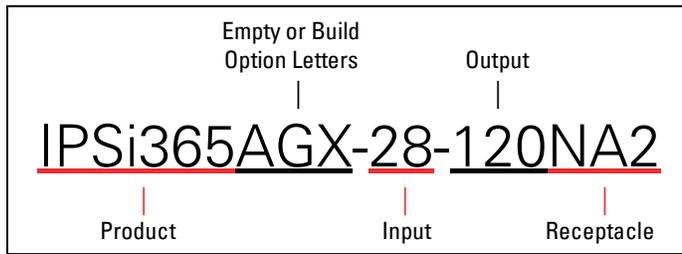


Figure 4. Example model number for an IPSi365 Intelligent Pure Sine Inverter.

Model Naming

Product	IPSi365
Build Options	A, G, P, X
DC Input Voltage	-12, -24, -40
AC Output Voltage	-120, -230

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

Build Options

Option A:	Built with AC Input, Line AC Detect & Autoswitch UPS
Option G:	Ground Fault Circuit Interrupter (GFCI) enabled
Option P:	Portable, folding handle and rubber feet
Option X:	Basic ruggedization and wide temperature operating range (-40°C to +55°C)

Line Item Options

Option U:	Inspected and certified to meet CSA SPE-1000
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Receptacle Options

NA1	North American 110V
H	Hardwire panel feed-through terminal block
NA2	North American 220V
WW	Worldwide universal 220V



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