

INV-12-120-400

DATA SHEET

12V to 120VAC 400W Inverter

Features

- Two separate AC outlets, 400W Total Output
- Low Voltage Disconnect saves batteries
- On/Off Switch
- 12VDC Cigarette Lighter Style Output
- USB Output for charging smartphones and other devices
- Wire Terminal 12VDC Voltage Inputs
- Overload and Thermal Protection
- Soft Start Technology
- Modified Sine Wave

Applications

- Operate AC powered equipment from vehicle / marine power
- Outdoor UPS and Remote Power Systems
- Solar Systems
- Emergency Power





Description

The INV-12-120-400 is a high efficiency (90%) power inverter to convert 12VDC to 120VAC 60Hz. The total power output is 400W continuous and 800W peak. The units have a low voltage disconnect feature to disconnect the load from the battery if battery voltage falls below 10V. This important feature protects the batteries from deadly over discharge which shortens the life of batteries.

The unit has two North America 3 Prong 120VAC Outlets, one 5V USB port and one 12V cigarette lighter port. All ports are equipped with dust covers.

The INV-12-120-400 features the latest modified sine wave and soft start technology. The modified sine wave closely approximates the grid AC power and is compatible with most AC powered devices. The soft start technology minimizes power spikes upon startup of the inverter by bringing up the AC voltage gradually.

The inverter has a metal casing with plastic accents and high speed thermostatically controlled cooling fan.

The units have multiple protections:

Low Voltage: When the voltage reaches 10.6V the unit will give a low voltage audible and visual alarm. If the battery voltage continues to reduce below 10V the unit will turn off the load. (Requires manual reset)

Over Voltage: The unit will give an audible and visible alarm when the voltage exceeds 15V. The load will be shut down at this time. (Requires manual reset)

Overload / Short Circuit: The unit will give audible and visual alarm if load exceeds the maximum rating. Once the load is reduced to within specification the unit will automatically restart.

Thermal: The unit will shut down automatically and provide an audible and visual alarm if the operating temperature is exceeded. (Requires manual reset). It's important to provide good ventilation around the unit during operation.

Specifications

	INV-12-120-400
Input Voltage	12VDC (10-15VDC) 40A Max
Output Voltages	Qty 2 120VAC +/- 10% , Qty 1 USB (5V 500mA), Qty 1 Cigarette Lighter Socket (12V 8A)
Continuous Output Power	400W Max Total
Peak Output Power	800W
Output Waveform	Modified Sine Wave 60Hz +/-1Hz
Efficiency	90%
Low Voltage Disconnect	<10V - Manual reset required
High Voltage Disconnect	>15V – Manual reset required
Protections	Low Battery, High Battery, Overload, Short Circuit, Thermal
Fuse (Located inside Housing)	Qty 2 32VDC, 40A
Suggested Input Wire Size	10AWG
Operating Temperature	-20C to +60C
Operating Humidity	<90%
Dimensions (LxWxH)	202 x 120 x 69mm (8 x 4.7 x 2.7")
Weight	0.7kg (1.54lb)
Warranty	1 Year
System Ordering	INV-12-120-400 12VDC to 120VAC 400W Power Inverter



For further information contact: Tyconsystems.com

