tbs electronics

Powersine 1000-12 / 1400-24

professional DC to AC true sinewave inverter

TECHNICAL DATASHEET

Description

The Powersine range of professional DC to AC true sinewave inverters, offer superior performance for a wide range of applications. Unlike many other inverters, the very clean and interference free output of a Powersine inverter ensures correct operation of sensitive equipment like displays, test equipment and battery chargers.

The very robust electronic and mechanical design, make the Powersine inverter series the best choice for reliability. Designed for an extremely long lifespan and protected against short circuits, overloading and high temperatures, a Powersine inverter will deliver trouble free operation for many years.

The newest available technology results in extremely efficient operation with very low 'no-load' consumption. The Automatic Standby Function (ASB), standard in all Powersine inverters, will even reduce the no-load consumption by an extra 70%!

All Powersine inverters are easy to install and operate. Each Powersine inverter comes standard with DC cables, and a very clear installation and operating instruction manual.

Features

- True sinewave AC output
- Robust design
- High surge power output
- Very efficient
- Protected against high/low battery voltage, high temperature, overload, short circuit and high ripple voltage
- Automatic Standby function to reduce no-load power consumption
- Variable speed fan for silent operation
- Remote on/off capability
- Remote control capability via TBSLink
- Easy to access connection bay for installing AC- and control wiring
- 1.5 meters DC connection cable included
- CE and e-mark certified
- 24 month warranty

Applications

- Recreational vehicles
- Solar power systems
- Industrial systems
- Mobile entertainment systems
- Service vehicles
- Maritime applications
- Remote homes

Designed to power your

- TV
- Microwave oven
- Coffeemaker
- Air conditioner
- Test & measurement equipment
- Desktop computers / Servers
- lighting
- A/V equipment
- Thermal printer
- Electric tools

Technical specifications

Parameter		PS1000-12	PS1400-24
Output power[1] :	Pnom	850VA	1000VA
	P10minutes	1050VA	1450VA
	Psurge	2000VA	2800VA
Output voltage		230Vac±2% or 115Vac±2%	
Output frequency		50Hz±0.05% or 60Hz±0.05%	
Output waveform		True sinewave (THD < 5%[1] @ Pnom)	
Admissible cos φ of load		0.2 – 1 (up to Pnom)	
Input voltage (±3% tolerance):	Nominal	12Vdc	24Vdc
	Range	10.5[2] – 16Vdc	21[2] – 31Vdc
Maximum efficiency		92%	92%
No load power consumption[3] [ASB]		<9.6W [2.5W]	<12W [3.5W]
Operating temperature range (ambient)		-20°C to +50°C	
ASB threshold		Pout=10W	
Protections against		Short circuit, overload, high temperature, AC back feed, high/low battery voltage and high input ripple voltage	
Indications		Power on, output power bar, short circuit/overload, high temperature, high/low battery voltage, high input ripple voltage and ASB mode	
DC input connection		Two wires, length 1.5 meters, ∅ 25mm^2	
AC output connection		Screw terminals	
Enclosure body size (L x W x H)		351 x 210 x 114mm	
Total weight		10.5kg	10.5kg
Protection class		IP21	
The inverter complies with the following standards		EN61000-6-3 (EN55022), EN61000-6-2 (EN61000-2/3/4, EN61000-4-3), LVD 73/23/EEC (EN60335-1), e4-95/54/EC, RoHS 2002/95/EC	

Note: the given specifications are subject to change without notice.

1) Measured with resistive load at 25°C ambient. Power ratings are subject to a tolerance of 4% and are decreasing as temperature rises with a rate of approx. 1.2%/°C starting from 25°C.
2) Undervoltage limit is dynamic. This limit decreases with increasing load to compensate the voltage drop across cables and connections.
3) Measured at nominal input voltage and 25°C.

Dimensions