tbs electronics

Powersine

professional DC to AC true sinewave inverter

Description | The PS2000-12 up to PS3500-48 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. Due to smart connection bay mapping of AC, DC and control connectors, all wiring can be installed in a fast and logical way.

Features

- True sinewave AC output
- Robust industrial design
- High surge power output
- Very efficient
- Protected against high/low battery voltage, high temperature, overload, short circuit and high ripple voltage
- Programmable Automatic Standby function to reduce no-load power consumption
- Variable speed fan for silent operation
- Remote on/off capability
- 16A programmable alarm relay
- Remote control capability via TBSLink
- Easy to access connection bay for installing AC-, DC and control wiring
- Trigger input
- CE certified
- 24 month warranty

Applications

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

Accessories

- Universal Remote Control with LCD[1)]
- Basic Remote Control with LEDs[2)]
- DC cable kits
- TBSLink communication kit including software

1)

2)

Technical specifications

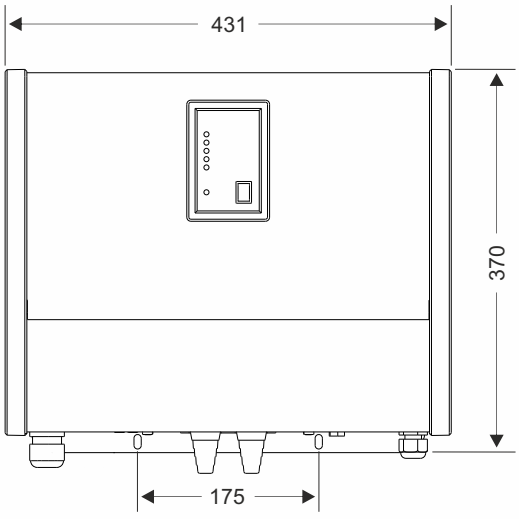
Parameter		PS2000-12 (art. no. 5008100)	PS2500-24 (art. no. 5008120)	PS3000-12 (art. no. 5008300)	PS3500-24 (art. no. 5008320)	PS3500-48 (art. no. 5008360)
Output power[1]	Pnom	1800W	2000W	2600W	2800W	2800W
	P10minutes	2100W	2500W	3200W	3800W	3800W
	Psurge	4000W	5500W	5000W	6500W	6500W
Output voltage		230Vac ± 2%				
Output frequency		50Hz or 60Hz ± 0.05%				
Output waveform		True sinewave (THD < 5%[1] @ Pnom)				
Allowed cos φ of load		0.2 – 1 (up to Pnom)				
Input voltage (±3% tolerance) : Nominal		12Vdc	24Vdc	12Vdc	24Vdc	48Vdc
	Range	10[2] – 16Vdc	20[2] – 32Vdc	10[2] – 16Vdc	20[2] – 32Vdc	40[2] – 64Vdc
Maximum efficiency		92%	93%	92%	93%	93%
No load power consumption[3]		<19W	<20W	<19W	<20W	<21W
[ASB]		[2.0W]	[2.0W]	[2.0W]	[2.0W]	[2.4W]
ASB threshold		Pout=20W				
Operating temperature range (ambient)		-20°C … +50°C (humidity max. 95% non condensing)				
Storage temperature range		-40°C … +80°C (humidity max. 95% non condensing)				
Cooling		Variable speed fan controlled by temperature and load				
TBSLink enabled		Yes				
Protected against		Short circuit, overload, high temperature, AC back feed, high/low battery voltage and high input ripple voltage				
Indications		Power on, output power bar, error and ASB mode				
DC input connections		M10 bolt terminals				
AC output connections		Screw terminals				
Enclosure body size		370 x 431 x 132mm				
Total weight		18.2 kg		18.5 kg		
Protection class		IP21 (mounted in upright position)				
Standards		CE marked meeting EMC directive 2004/108/EC and LVD 2006/95/EC complying with EN60335-1, RoHS 2002/95/EC				

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

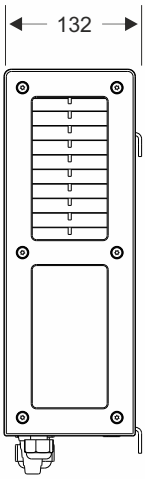
[1] Measured with resistive load at 25°C ambient. Power ratings are subject to a tolerance of 10% and are decreasing as temperature rises with a rate of approx. 1.2%/°C starting from 25°C.
[2] Undervoltage limit is dynamic. This limit decreases with increasing load to compensate the voltage drop across cables and connections
[3] Measured at nominal input voltage and 25°C

Dimensions

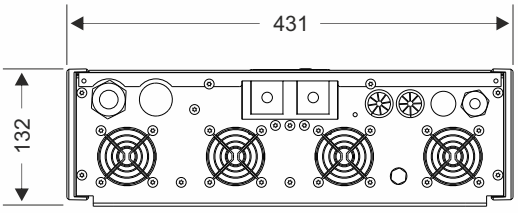
Front view



Side view



Bottom view



measurement units : millimeters