# tbs electronics



#### Features

- True sinewave AC output
- Robust design
- High surge power output
- Very efficient
  Protected against low battery voltage, high
- temperature, overload and short circuit • Automatic Standby function to reduce no-load
- power consumptionVariable speed fan for silent operation
- IEC320 worldwide accepted AC outlet (IEC320 plug included)
- 1.5 meters DC connection cable included
- CE and e-mark certified
- 24 month warranty

## Powersine

professional DC to AC true sinewave inverter

**Description** The PS300-12, PS350-24 and PS450-48 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. Each Powersine inverter comes standard with DC cables, separate IEC320 plug and a very clear installation and operating instruction manual.

#### Applications

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

#### Designed to power your..

#### • TV

- Notebook computer
- Battery charger
- Portable work light
- Test & measurement equipment
- DVD/Blu-ray player
- Cell/Smart phone charger
- Thermal printer

Parameter		P\$300-12	PS350-24	PS450-48
Output power <sup>1)</sup>	Pnom	250VA	300VA	300VA
	P10minutes	330VA	360VA	450VA
	Psurge	700VA	800VA	800VA
Output voltage		230Vac ± 2% or 115Vac ± 2%		
Output frequency		50Hz ± 0.05% or 60Hz ± 0.05%		
Output waveform		True sinewave (THD < 5% <sup>1)</sup> @ Pnom)		
Admissible $\cos \phi$ of load		0.2 – 1 (up to Pnom)		
Input voltage (±3% tolerance) :	Nominal	12V	24V	48V
	Range	10.5 <sup>2)</sup> – 16Vdc	21 <sup>2)</sup> – 31Vdc	$41^{2} - 60$ Vdc
Maximum efficiency		91%	93%	95%
No load power consumption <sup>3)</sup>		<3W	<3.5W	<6.5W
[ASB]		[0.7W]	[0.8W]	[1.3W]
ASB threshold		Pout=12W	Pout=15W	Pout=15W
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		No		
Protected against		Short circuit, overload, high temperature, low		
		battery voltage		
Indications		Power on, error and ASB mode		
DC input connections		Two wires, length 1.5 meters, 4mm <sup>2</sup>		
AC output connections		IEC320 outlet		
Enclosure body size		184 x 98 x 130mm (without mounting brackets)		
Total weight		3.5 kg		
Protection class		IP20		
Standards		CE marked meeting EMC directive 2004/108/EC and LVD 2006/95/EC complying with EN60335-1, e4-95/54/EC, RoHS 2002/95/EC		

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

<sup>9</sup> 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
 <sup>a)</sup> Undervoltage limit is dynamic. This limit decreases with increasing load to compensate the voltage drop across cables and connections
 <sup>b)</sup> Measured at nominal input voltage and 25°C

### Dimensions

**Front view** 



Side view





