



Powersine 200-12 / 200-24 / 200-48  
Powersine 300-12 / 350-24 / 450-48  
Powersine 600-12 / 800-24 / 800-48



- ◀ Delivers Pure sine wave output
- ◀ 200, 300 & 550watt @ 12volts
- ◀ 200, 300 & 700 watt @ 24volts
- ◀ Low Frequency Toroidal transformer design for high power surges and design safety
- ◀ Exceptional power output per size and weight
- ◀ Easy to use powersave mode for low stand by current
- ◀ High quality, European designed power inverters packed with advanced components for long term reliability
- ◀ Two year warranty

The TBS range of pure sine wave inverters are for the serious user looking for reliability and quality AC power. Featuring a very advanced microprocessor control system designed to control precisely the output sine wave delivered from the inverter. This processor ensures clean power across all power levels and output loads as well as providing all inbuilt protection features with an easy to use Powersave mode.

The TBS inverter series features an advanced microprocessor control system that controls all the system workings. This control is done by fast and efficient software algorithms dedicated to protecting the inverter and your system, while the real power of the unit is delivered via the low loss toroidal transformer. This toroidal transformer is designed to generate surge loads well in excess of the rated power output for long periods of time. The transformer and microprocessor both work together to provide a reliable inverter output under all conditions (including harsh, vibration prone applications). You could call the TBS range of inverters Built like a Tank.

Besides the advanced inbuilt diagnosis system that monitors the inverter, there is also an efficient Power Save Mode (PSM) system that makes it possible to drastically reduce the inverters own power consumption when no AC load is present. This power level can be adjusted as required to suit the users low power threshold values, all that is required is to switch the on / off switch to the desired threshold point.

All TBS inverters are simple to use, simply connect to the battery bank and away you go. Although they are slightly heavier than microprocessor controlled power inverters, the long term benefits of using a toroidal transformer make the TBS a far better choice. Each TBS inverter features solid mounting points to make your installation easy.



 Supplier No. N13018



**Enerdrive**  
DRIVING YOUR ENERGY NEEDS

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**Technical Specifications - Powersine 200-12 / 200-24 / 200-48**

Parameter		PS200-12	PS200-24	PS200-48
Output power <sup>1)</sup> :	Pnom	175VA	175VA	175VA
	P10minutes	210VA	220VA	220VA
	Psurge	400VA	500VA	500VA
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 φ of load		0.2 – 1 (up to Pnom)		
Input voltage (±3% tolerance):	Nominal	12Vdc	24Vdc	48Vdc
	Range	10.5 <sup>2)</sup> – 16Vdc	21 <sup>2)</sup> – 31Vdc	41 <sup>2)</sup> – 60Vdc
Maximum efficiency		90%	91%	93%
No load power consumption <sup>3)</sup> [ASB]		<2.8W [0.6W]	<3W [0.8W]	<4W [1.2W]
	Operating temperature range (ambient)	-20°C to +50°C		
ASB threshold		Pout=12W	Pout=15W	Pout=15W
Protections against		Short circuit, overload, high temperature and low battery voltage		
Indications (by pre-programmed flashing sequences of the power LED)		Power on, short circuit/overload, high temperature, high/low battery voltage and ASB mode		
DC input connection		Two wires, length 1.5 meters, ∅ 4mm <sup>2)</sup>		
AC output connection		IEC-320 outlet		
Enclosure body size		154 x 98 x 130mm (without mounting brackets)		
Total weight		2.4kg	2.4kg	2.4kg
Protection class		IP20		
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. 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.

**Technical Specifications - Powersine 300-12 / 350-24 / 450-48**

Parameter		PS300-12	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 φ of load		0.2 – 1 (up to Pnom)		
Input voltage (±3% tolerance):	Nominal	12Vdc	24Vdc	48Vdc
	Range	10.5 <sup>2)</sup> – 16Vdc	21 <sup>2)</sup> – 31Vdc	41 <sup>2)</sup> – 60Vdc
Maximum efficiency		91%	93%	95%
No load power consumption <sup>3)</sup> [ASB]		<3W [0.7W]	<3.5W [0.8W]	<6.5W [1.3W]
	Operating temperature range (ambient)	-20°C to +50°C		
ASB threshold		Pout=12W	Pout=15W	Pout=15W
Protections against		Short circuit, overload, high temperature and low battery voltage		
Indications (by pre-programmed flashing sequences of the power LED)		Power on, short circuit/overload, high temperature, high/low battery voltage and ASB mode		
DC input connection		Two wires, length 1.5 meters, ∅ 4mm <sup>2)</sup>		
AC output connection		IEC-320 outlet		
Enclosure body size		184 x 98 x 130mm (without mounting brackets)		
Total weight		3.5kg	3.5kg	3.5kg
Protection class		IP20		
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. 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.

**Technical Specifications - Powersine 600-12 / 800-24 / 800-48**

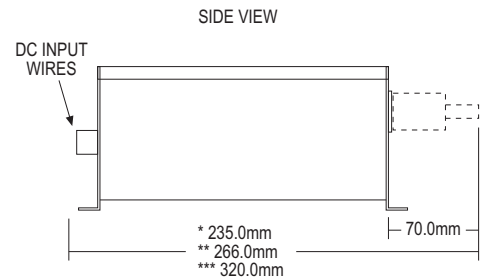
Parameter		PS600-12	PS800-24	PS800-48
Output power <sup>1)</sup> :	Pnom	500VA	600VA	600VA
	P10minutes	600VA	800VA	800VA
	Psurge	1000VA	1200VA	1250VA
Output voltage		230Vac±2% or 115Vac±2%		
Output frequency		50Hz±0.05% or 60Hz±0.05%		
Output waveform		True sinewave (THD < 5% <sup>1)</sup> @ Pnom)		
Admissible cos φ of load		0.2 – 1 (up to Pnom)		
Input voltage (±3% tolerance):	Nominal	12Vdc	24Vdc	48Vdc
	Range	10.5 <sup>2)</sup> – 16Vdc	21 <sup>2)</sup> – 31Vdc	41 <sup>2)</sup> – 60Vdc
Maximum efficiency		92%	93%	94%
No load power consumption <sup>3)</sup> [ASB]		<4.8W [0.4W]	<6.5W [0.7W]	<8.2W [0.5W]
	Operating temperature range (ambient)	-20°C to +50°C		
ASB threshold		Pout=15W		
Protections against		Short circuit, overload, high temperature and low battery voltage		
Indications (by pre-programmed flashing sequences of the power LED)		Power on, short circuit/overload, high temperature, high/low battery voltage and ASB mode		
DC input connection		Two wires, length 1.5 meters, ∅ 10mm <sup>2)</sup>		
AC output connection		IEC-320 outlet		
Enclosure body size		228 x 113 x 163mm (without mounting brackets)		
Total weight		6.2kg	6.2kg	6.2kg
Protection class		IP20		
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. 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**

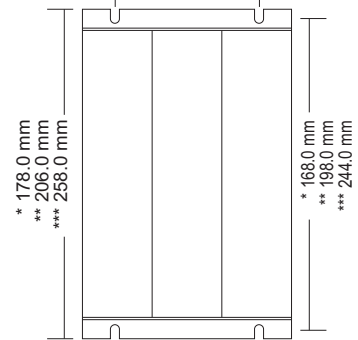
- \* Powersine 200-12 / 200-24 / 200-48
- \*\* Powersine 300-12 / 350-24 / 450-48
- \*\*\* Powersine 600-12 / 800-24 / 800-48



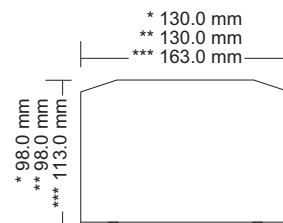
TOTAL LENGTH INCLUDING IEC320 PLUG AND NEEDED SPACE FOR DC INPUT WIRES

**TOP VIEW**
**MOUNTING SCREW SPACING WIDTH**

- \* 90.0 mm
- \*\* 113.0 mm
- \*\*\* 113.0 mm


**MOUNTING SCREW SPACING LENGTH**

- \* (Hole diameter = 5.5 mm)
- \*\* (Hole diameter = 5.5 mm)
- \*\*\* (Hole diameter = 6.0 mm)

**FRONT/ BACK VIEW**


DEALER:

TBS Electronics Products proudly imported and distributed by

**Enerdrive**, driving your energy needs.

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