



**victron energy**  
B L U E P O W E R

## Phoenix Inverters

180VA – 750VA

# Phoenix Inverter

### SinusMax - Superior engineering

Developed for professional duty, the Phoenix range of inverters is suitable for the widest range of applications. The design criteria have been to produce a true sine wave inverter with optimised efficiency but without compromise in performance. Employing hybrid HF technology, the result is a top quality product with compact dimensions, light in weight and capable of supplying power, problem-free, to any load.

### Extra start-up power

A unique feature of the SinusMax technology is very high start-up power. Conventional high frequency technology does not offer such extreme performance. Phoenix inverters, however, are well suited to power up difficult loads such as computers and low power electric tools.

### To transfer the load to another AC source: the automatic transfer switch

For our lower power models we recommend the use of our Filax Automatic Transfer Switch. The Filax features a very short switchover time (less than 20 milliseconds) so that computers and other electronic equipment will continue to operate without disruption.

### LED diagnosis

Please see manual for a description.

### Remote on/off switch

Connector for remote on off switch available on all models.

### Remote control panel (750VA model only)

Connects to the inverter with a RJ12 UTP cable (length 3 meter, included).

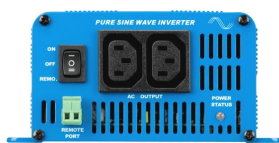
### DIP switch for 50/60Hz selection (750VA model only)

### DIP switches for Power Saving Mode (750VA model only)

When operating in Power Saving Mode, the no-load current is reduced to 1/3 of nominal. In this mode the inverter is switched off in case of no load or very low load, and switches on every two seconds for a short period. If the output current exceeds a set level, the inverter will continue to operate. If not, the inverter will shut down again. The on/off level can be set from 15W to 85W with DIP switches.

### Available with three different output sockets

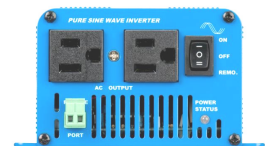
Please see pictures below.



Phoenix Inverter 12/350  
with IEC-320 sockets



Phoenix Inverter 12/180  
with Schuko socket



Phoenix Inverter 12/180  
with Nema 5-15R sockets



Victron Energy B.V. / De Paal 35 / 1351 JG ALMERE / The Netherlands

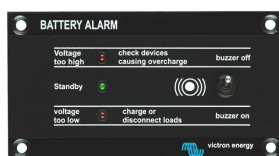
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## Specifications

Phoenix Inverter	12 Volt 24 Volt 48 Volt	12/180 24/180 48/180	12/350 24/350 48/350	12/750 24/750 48/750
Cont. AC power at 25 °C (VA) (3)		180	350	750
Cont. power at 25 °C / 40 °C (W)		175 / 150	300 / 250	700 / 650
Peak power (W)		350	700	1400
Output AC voltage / frequency (4)		110VAC or 230VAC +/- 3% 50Hz or 60Hz +/- 0,1%		
Input voltage range (V DC)		10,5 - 15,5 / 21,0 - 31,0 / 42,0 - 62,0		
Low battery alarm (V DC)		11,0 / 22 / 44		
Low battery shut down (V DC)		10,5 / 21 / 42		
Low battery auto recovery (V DC)		12,5 / 25 / 50		
Max. efficiency 12 / 24 / 48 V (%)		87 / 88 / 89	89 / 89 / 90	91 / 93 / 94
Zero-load power 12 / 24 / 48 V (W)		2,6 / 3,8 / 4,0	3,1 / 5,0 / 6,0	14 / 14 / 13
Zero-load power in Power Saving mode		n. a.	n. a.	3 / 4 / 5
Protection (2)		a - e		
Operating temperature range		-20 to +50 °C (fan assisted cooling)		
Humidity (non condensing)		max 95%		
<b>ENCLOSURE</b>				
Material & Colour		aluminium (blue Ral 5012)		
Battery-connection		1)	1)	Screw terminals
Standard AC outlets		IEC-320 (IEC-320 plug included), Schuko, or Nema 5-15R		
Other outlets (at request)		United Kingdom, Australia/New Zealand		
Protection category		IP 20		
Weight (kg / lbs)		2,7 / 5,4	3,5 / 7,7	2,7 / 5,4
Dimensions (hwxwd in mm) (hwxwd in inches)		72x132x200 2.8x5.2x7.9	72x155x237 2.8x6.1x9.3	72x180x295 2.8x7.1x11.6
<b>ACCESSORIES</b>				
Remote control panel		n. a.	n. a.	Optional
Remote on-off switch		Two pole connector		RJ12 plug
Automatic transfer switch		Filax		
<b>STANDARDS</b>				
Safety		EN 60335-1		
Emission / Immunity		EN55014-1 / EN 55014-2		

- 1) Battery cables of 1.5 meter (12/180 with cigarette plug)
- 2) Protection
  - a. Output short circuit
  - b. Overload
  - c. Battery voltage too high
  - d. Battery voltage too low
  - e. Temperature too high
- 3) Non linear load, crest factor 3:1
- 4) Frequency can be set by DIP switch (750VA models only)

## Accessories



### Battery Alarm

An excessively high or low battery voltage is indicated by an audible and visual alarm, and a relay for remote signalling.



### Remote Control Panel

(750VA models only)  
RJ12 UTP cable to connect to the inverter is included (length: 3 meter).



### BMV-600 Battery Monitor

The BMV-600 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms to exactly determine the state of charge of the battery. The BMV-600 selectively displays battery voltage, current, consumed Ah or time to go. The monitor also stores a host of data regarding performance and use of the battery.