

# Phoenix Inverters

180VA – 1200 VA 230V/50Hz and 110V/60Hz

[www.victronenergy.com](http://www.victronenergy.com)



**Phoenix Inverter  
12/750**

### 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 optimized 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.



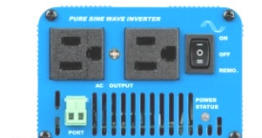
**Phoenix Inverter  
12/800 with Schuko socket**



**Phoenix Inverter 12/350  
with IEC-320 sockets**



**Phoenix Inverter 12/180  
with Schuko socket**



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

Phoenix Inverter	12 Volt 24 Volt 48 Volt	12/180 24/180	12/350 24/350 48/350	12/750 24/750 48/750	12/800 24/800 48/800	12/1200 24/1200 48/1200
Cont. AC power at 25 °C (VA) (3)		180	350	750	800	1200
Cont. power at 25 °C / 40 °C (W)		175 / 150	300 / 250	700 / 650	700 / 650	1000 / 900
Peak power (W)		350	700	1400	1600	2400
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			9,2 - 17,3 / 18,4 - 34,0 / 36,8 - 68,0		
Low battery alarm (V DC)	11,0 / 22 / 44			10,9 / 21,8 / 43,6		
Low battery shut down (V DC)	10,5 / 21 / 42			9,2 / 18,4 / 36,8		
Low battery auto recovery (V DC)	12,5 / 25 / 50			12,5 / 25 / 50		
Max. efficiency (%)	87 / 88	89 / 89 / 90	91 / 93 / 94	91 / 93 / 94	92 / 94 / 94	
Zero-load power (W)	2,6 / 3,8	3,1 / 5,0 / 6,0	14 / 14 / 13	6 / 6 / 6	8 / 9 / 8	
Zero-load power in search mode	n. a.	n. a.	3 / 4 / 5	2	2,3	
Protection (2)	a - e					
Operating temperature range	-40 to +50°C (fan assisted cooling)					
Humidity (non condensing)	max 95%					

#### ENCLOSURE

Material & Colour	aluminium (blue Ral 5012)					
Battery-connection	1)	1)	Screw terminals	1)	1)	
Standard AC outlets	230V: IEC-320 (IEC-320 plug included), CEE 7/4 (Schuko) 120V: Nema 5-15R					
Other outlets (at request)	BS 1363 (United Kingdom) AN/NZS 3112 (Australia, New Zealand)					
Protection category	IP 20					
Weight (kg / lbs)	2,7 / 5,4	3,5 / 7,7	2,7 / 5,4	6,5 / 14,3	8,5 / 18,7	
Dimensions (hxwx in mm) (hxwx in inches)	72x132x200 2.8x5.2x7.9	72x155x237 2.8x6.1x9.3	72x180x295 2.8x7.1x11.6	108x165x305 4.2x6.4x11.9	108x165x305 4.2x6.4x11.9	

#### ACCESSORIES

Remote control panel	n. a.	n. a.	Optional	n. a.	n. a.	
Remote on-off switch	Two pole connector		RJ12 plug	Two pole connector		
Automatic transfer switch	Filax					

#### STANDARDS

Safety	EN 60335-1					
Emission Immunity	EN55014-1 / EN 55014-2/ EN 61000-6-2 / EN 61000-6-3					

- 1) Battery cables of 1.5 meter (12/180 with cigarette plug)  
2) Protection key:  
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)



#### 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 Battery Monitor

The BMV 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 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.