Inverters VE-Direct – new models

250W – 1600W 230V

www.victronenergy.com



Inverter 12/375 VE.Direct



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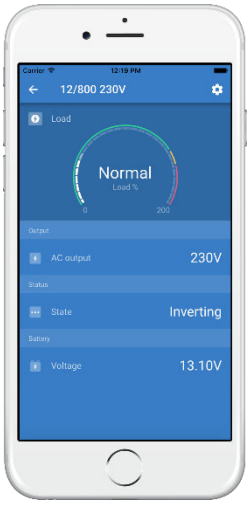
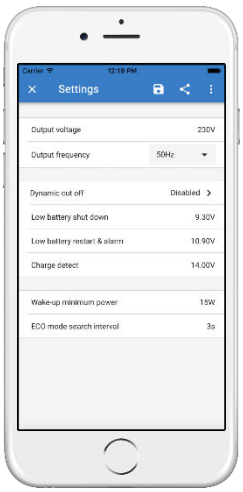




New models: more power per kg and per dm^3, and better high temperature performance.
Please consult our price list for availability: https://www.victronenergy.com/information/pricelist

VE.Direct communication port

The VE.Direct port can be connected to:

- A computer (VE.Direct to USB interface cable needed)
- Apple and Android smartphones, tablets, MacBook's and other devices (VE.Direct Bluetooth Smart dongle needed)

Fully configurable:

- Low battery voltage alarm trip and reset levels
- Low battery voltage cut-off and restart levels
- Dynamic cut-off: load dependent cut-off level
- Output voltage 210 - 230V
- Frequency 50 Hz or 60 Hz
- ECO mode on/off and ECO mode sense level

Monitoring:

- In- and output voltage, % load and alarms

Proven reliability

The full bridge plus toroidal transformer topology has proven its reliability over many years.
The inverters are short circuit proof and protected against overheating, whether due to overload or high ambient temperature.

High start-up power

Needed to start loads such as power converters for LED lamps, halogen lamps or electric tools.

ECO mode

When in ECO mode, the inverter will switch to standby when the load decreases below a preset value (min load: 15W). Once in standby the inverter will switch on for a short period (adjustable, default: every 2,5 seconds). If the load exceeds a preset level, the inverter will remain on.

Remote on/off

A remote on/off switch can be connected to a two-pole connector, or between battery plus and the left-hand contact of the two-pole connector.

LED diagnosis

Please see manual for a description.

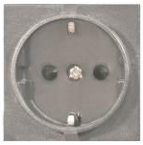
To transfer the load to another AC source: the automatic transfer switch

For our low power inverters, we recommend 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.

DC connection with screw terminals

No special tools needed for installation

Available with different output sockets

Schuko	UK	AU/NZS	IEC-320 (male plug included)
			

Inverter VE.Direct 230V/50Hz	12/250 24/250 48/250	12/375 24/375 48/375	12/500 24/500 48/500	12/800 24/800 48/800	12/1200 24/1200 48/1200	12/1600 24/1600 48/1600
Article number (1)	PINxx1251X10	PINxx1371X10	PINxx1501X10	PINxx1801X10	PINxx2121X10	PINxx2161X00
Cont. power at 25°C	250W	375W	450W	800W	1150W	1450W
Cont. power at 40°C	200W	300W	380W	650W	1000W	1300W
Time-limited power (cold start)	300W/15s	450W/10s	500W/1h	900W/1h	1200W/1h	1600W/1h
Peak power	400W/2s	600W/2s	750W/3s	1200W/15s	1600W/15s	2100W/15s
Output AC voltage / frequency (adjustable)	230VAC I +-3% 50Hz or 60Hz I +-0,1%					
Input voltage range	9,2 - 17 / 18,4 - 34 / 36,8 - 62 V					
DC low shut down (adjustable)	9,3 / 18,6 / 37,2 V					
Dynamic (load dependent) DC low shut down (fully configurable)	Dynamic cut-off, see https://www.victronenergy.com/live/ve.direct:phoenix-inverters-dynamic-cutoff					
DC low restart and alarm (adjustable)	10,9 / 21,8 / 43,6 V					
Battery charged detect (adjustable)	14 / 28 / 56 V					
Max. efficiency	84 / 86 / 86 %	86 / 88 / 88 %	86 / 88 / 88 %	90 / 90 / 91 %	91 / 91 / 92%	91 / 91 / 92%
Zero-load power	5 / 6 / 8 W	6 / / 9 W	/ / 8 / 10 W	8 / 8 / 9 W	10 / 11 / 12 W	14 / 14 / 15 W
Default zero-load power in ECO mode (default retry interval: 2,5 s, adjustable)	1 / 1 / 2 W	1 / 1 / 2 W	1 / 1 / 2 W	1 / 2 / 2 W	1 / 2 / 3 W	1 / 2 / 3 W
ECO mode stop and start power setting	Adjustable					
Protection (2)	a - g					
Operating temperature range	-40 to I 65°C (fan assisted cooling) Derate 1,25% per °C above 40°C					
Humidity (non-condensing)	max 95%					
ENCLOSURE						
Material & Colour	Steel chassis and plastic cover (blue Ral 5012)					
Battery-connection	Screw terminals					
Maximum cable cross-section	10 mm²	10 mm²	10 mm²	25/16/16 mm²	35/25/25 mm²	50/25/25 mm²
Standard AC outlets	230V: Schuko (CEE 7/4), IEC-320 (male plug included) UK (BS 1363), AU/NZ (AS/NZS 3112)					
Protection category	IP 21					
Weight (kg)	2,7	3	3,5	5,5	7,2	8,9
Dimensions (h x w x d, mm)	86 x 165 x 260 86 x 165 x 260 86 x 165 x 260	86 x 165 x 260 86 x 165 x 260 86 x 165 x 260	86 x 172 x 275 86 x 172 x 275 86 x 172 x 275	95 x 231 x 334 105 x 216 x 310 105 x 216 x 310	117 x 231 x 374 117 x 231 x 333 117 x 231 x 333	117 x 231 x 395 117 x 231 x 365 117 x 231 x 365
ACCESSORIES						
Remote on-off	Yes					
Automatic transfer switch	Filax					
STANDARDS						
Safety	EN-IEC 60335-1 / EN-IEC 62109-1					
EMC	EN 55014-1 / EN 55014-2 / IEC 61000-6-1 / IEC 61000-6-2 / IEC 61000-6-3					
Automotive Directive	ECE R10-4					
1) Output socket: X=1: IEC X=2: Schuko X=3: AU/NZ X=4: UK	2) Protection key: a) output short circuit b) overload c) battery voltage too high d) battery voltage too low e) temperature too high f) DC ripple too high					



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



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.



VE.Direct Bluetooth Smart dongle

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