



On-grid Single Phase Inverter

ENV 1K/1.5K

Benefits

Flexible and Efficient

- Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%
- Max. efficiency of 97.2%, European efficiency of 96.7%
- Super wide input voltage range(50V-450V), supporting system with a minimum of 3 solar panels
- With reduced derating under high temperature, the generating capacity is improved

Convenient Installation

- Transformerless, smaller and lighter up to 5.6kg
- AC output quick connector design, for faster installation

Smart and Easy to Use

- One-button safety setting, easy configuration of all parameters
- Built-in independent RTC chip, supporting data storage of 25 years
- Integrated RS232 / Wi-Fi interfaces, for improved communication
- Free monitoring anytime anywhere
- Local and remote intelligent maintenance by PC, IOS and Android devices
- Responds to power grid dispatching, energy management of micro-grids

Safe and Reliable

- IP65 protection for indoor and outdoor installation
- Aluminum case design to enhance heat dissipation and prevent rust corrosion, prolong life time
- Optional built-in high voltage DC switch for safer maintenance and application
- Natural convection for longer life

Technical Data

ENV 1K/1.5K

Type	ENV 1K	ENV 1.5K
Input (DC)		
Max. DC Power [W]	1200	1800
Max. DC Voltage [V]		450
MPPT Voltage range [V]		60-425
Nominal DC Voltage [V]		360
Start Voltage [V]		70
Min. DC Voltage [V]		50
Max. DC Input Current [A]		11
Number of DC Connection Sets per MPPT		1
Number of MPPT		1
DC Switch		optional
Output (AC)		
Rated AC Power [W]	1000	1500
Max. AC Power [W]	1100	1650
Rated AC Current [A]	4.3	6.5
Max. AC Current [A]	5.3	7.9
Nominal AC voltage/ range		220V, 230V, 240V/180V-280V
Grid frequency/ range		50Hz, 60Hz/±5Hz
Power factor [cos φ]		>0.99 [full load]
Total Harmonic Distortion [THDi]		< 3%
Feed-in		1L+N+PE
Efficiency		
Max. Efficiency	97.1%	97.2%
Euro Efficiency [at 360Vdc]	96.6%	96.7%
MPPT Accuracy		>99.5%
Protection		
Internal Over-voltage Protection		Integrated
DC Insulation Monitoring		Integrated
DCI Monitoring		Integrated
GFCI Monitoring		Integrated
Grid Monitoring		Integrated
AC Short Circuit Current Protection		Integrated
Thermal Protection		Integrated
Anti-island protection monitoring		AFD
Interface		
AC Connection		Plug-in connector
DC Connection		MC4/H4
LCD / LED Display		LCD (16x2 Characters, Backlight) / LED (3 Lights)
Display Language		English
Datalogger & Communication		RS232 (Standard) / Wi-Fi (Optional)
General Data		
Topology		Transformerless
Consumption at Night [W]		<0.2
Consumption at Standby [W]		6
Operating Temperature Range		-25°C to +60°C (45°C to 60°C with derating)
Cooling Method		Natural Convection
Ambient Humidity		0% to 100% Non-condensing
Altitude		Up to 2000m (without derating)
Noise [dBA]		<15
Ingress Protection		IP65 (Indoor & Outdoor Installation)
Mounting		Rear Panel
Dimensions (H*W*D) [mm]		315*260*120
Net Weight [kg]		5.6
Standard Warranty [Year]		5 (Standard) / 10 / 15 / 20 / 25 (Optional)
Certificates	IEC62109-1/2, IEC61000-6-2/3, IEC61683, IEC60068-2, IEC62116, IEC61717, PEA/MEA, NRS 097-2-1, UTE-C-15-712-1, VDE0126-1-1/A1, VDE-AR-N 4105, AS4777.2, AS4777.3, C-TICK, CQC NB/T 32004, G83-2, NBR 16149, NBR 16150, TF 3.2.1, C10/11	