



## On-grid Single Phase Inverter

# ENV 25K/33K/40K/50K/60K

### Benefits

#### Flexible and Efficient

- Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%
- Three MPPT which are compatible to all kinds of solar roofs
- Max. efficiency of 98.8%, European efficiency of 98.5%
- Super wide input voltage range(180V-1000V), supporting various solar panels and string designs

#### Convenient Installation

- Aluminum case design, smaller and lighter
- Integrate DC combiner box, reduce system cost
- Separate area for maintenance, easy and quick for repair

#### 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 LCD graphical display, showing daily/monthly/yearly generation
- Integrated with the function of reactive power control & ZVRT, responds to power grid dispatching, energy management of grid
- Integrate string current monitoring, monitor string working status

#### Safe and Reliable

- IP65 protection for indoor and outdoor installation
- Optional DC&AC surge protection, guarantee system safety
- Optional Anti-PID module, protect panels from PID damage
- Aluminum case design to enhance heat dissipation and resist rust corrosion, prolong life time

### Technical Data

## ENV 25K/33K/40K/50K/60K

Type	ENV 25K	ENV 33K	ENV 40K	ENV 50K	ENV 60K
<b>Input (DC)</b>					
Max. DC Power [W]	30300	36300	48400	60500	66000
Max. DC Voltage [V]			1000		
MPPT Voltage Range [V]	180-900			280-900	
Nominal DC Voltage [V]			600		
Start Voltage[V]	200			300	
Min. DC Voltage[V]	180			250	
Max. DC Input Current PV1 / PV2 [A]	22/22/22		40/30/30		40/40/40
Number of MPPT			3		
Number of DC Connection Sets per MPPT	2/2/2		4/3/3		4/4/4
DC Switch	Integrated				
<b>Output (AC)</b>					
Rated AC Power [W](@230V,50Hz)	25000	30000	40000	50000	60000
Max. AC Power [W]	27500	33000	44000	55000	60000
Rated AC Current [A]	37.9	45.5	61.0	76.0	87.0
Max. AC Current [A]	42.0	50.0	65.0	80.0	90.0
Nominal AC voltage/ range	3/N/PE, 220/380V, 230/400V, 240/415V; 180V-280V/312V-485V				
Grid frequency / range	50Hz, 60Hz / 44Hz-55Hz, 54-65Hz				
Power factor,adjustable [cos φ]	0.8 leading~0.8 lagging				
Total Harmonic Distortion (THDi)	< 3% ( at nominal power )				
Feed-in	3L+N+PE				
<b>Efficiency</b>					
Max. Efficiency	98.6%	98.8%	98.8%	98.8%	98.9%
Euro Efficiency (@ 600Vdc)	98.4%	98.5%	98.5%	98.5%	98.6%
MPPT Accuracy	>99.5%				
<b>Protection</b>					
Internal Over-voltage Protection	Integrated				
DC Insulation Monitoring	Integrated				
DCI Monitoring	Integrated				
GFCI Monitoring	Integrated				
Grid Monitoring	Integrated				
AC Short Circuit Current Protection	Integrated				
LVRT	Integrated				
Thermal Protection	Integrated				
AC Surge Protection	Integrated (II)				
String Current Monitoring	Integrated				
Anti-PID Module	Optional				
DC Surge Protection	Integrated (II)				
DC Fuse	Optional				
Anti-island protection monitoring	AFD				
<b>Interface</b>					
DC Connection	MC4/H4				
AC Connection	Terminal Block				
LCD & LED Display	3.5 inch Graphic LCD Display				
Display Language	English				
Communication port	2*RS485、 1*RS232				
Communication	Wi-Fi/GPRS/Ethernet ( Optional )				
<b>General Data</b>					
Topology	Transformerless				
Consumption at Night [W]	<0.6				
Consumption at Standby [W]	<10				
Operating Temperature Range	-25°C to +60°C ( 45°C to 60°C with derating )				
Cooling Method	Intelligent fan				
Ambient Humidity	0% to 100% Non-condensing				
Altitude	3000m ( > 2000m power derating )				
Noise [dBA]	<35				
Ingress Protection	IP65 ( Indoor & Outdoor Installation )				
Mounting	Rear Panel				
Dimensions (H*W*D) [mm]	700*530*260		800*550*280		
Weight [kg]	48		68		
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,G59-3,NBR 16149,NBR 16150,TF 3.2.1				