

# 1500V 1.25MW Grid-Connected PV Inverter

## EA1250KHV



Compared with traditional centralized 1000V inverter, EA1250KHV is featured with high DC side voltage (Max. 1500V), it reduces DC side current, cutting down the investment cost of DC cables and DC combiner box, and increases the output voltage of AC side, reducing current and power loss, that increases efficiency of the system solutions and decreases costs of total solutions.

### Features

#### High Reliability

- Integrated fans featured with online failure detection function improving the overall reliability
- Strengthened electrical insulation design for high altitude and high pollution level, allowable maximum altitude up to 4500 m
- DSP + CPLD full-digital control, multiple and multilevel protections of overcurrent, overvoltage and overtemperature for software and hardware
- Multiple dust proof, strict thermal design, adapting to harsh natural environment
- CQC, ZVRT, Top-Runner certification approved

#### Low cost

- Integrated SVG function, reducing initial investment
- 1500V voltage grade, reducing DC and AC side current, decreasing system loss, cutting down costs of total solutions

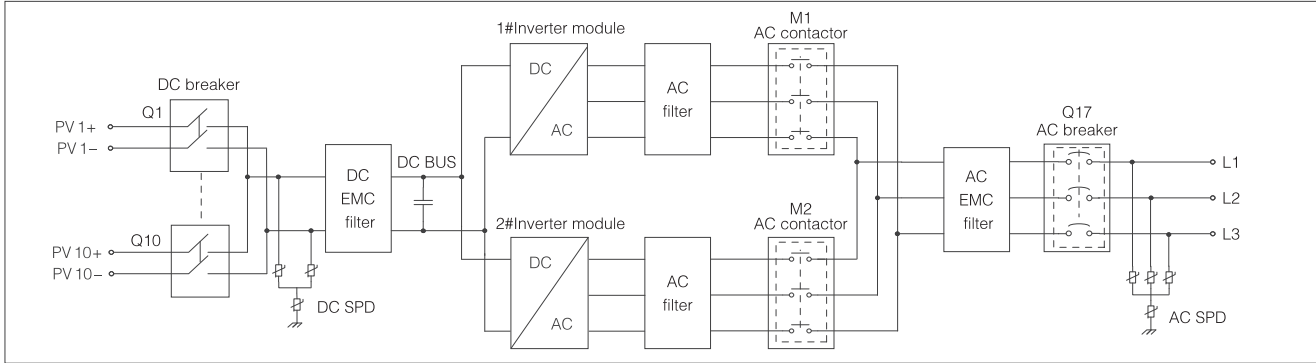
#### High Efficiency Power Generation

- Dormancy function, sleeping at light load and awaking at heavy load
- NCP 1 three-level technology, the maximum efficiency up to 99.0%, the fifth generation high-temperature and high efficiency IGBT, improving overall power generation
- Anti-PID function, reducing loss of power generation and extending the life of PV panels.

#### Intelligent & friendly

- 7 inch LCD display screen, supporting fault alarm query and download function
- Support zero voltage, low voltage and high voltage ride through
- Adjustable reactive power, power factor from 0.8 leading to 0.8 lagging adjustable

### Schematic diagram



### Technical Data

MODEL	EA1250KHV
INPUT (DC)	
Max. input voltage	1500 V
Starting voltage	840 V
Min. operating voltage	800 V
Number of DC shunt inputs	10 / 12
MPPT voltage range	800 ~ 1300 V
Number of MPPTs	1
OUTPUT (AC)	
Rated grid power	550 V
Grid voltage tolerance	440 ~ 632 V (– 20% ~ + 15%)
Rated output power	1250 KW
Max. AC output power	1375 KVA (110% overloaded)
Max. output current	1443 A
THDi	< 3% (rated power)
Rated grid frequency	50 Hz / 60 Hz
Grid frequency tolerance	45 ~ 55 Hz / 55 ~ 65 Hz (– 10% ~ + 10%)
Power factor	0.8 (leading) ~ 0.8 (lagging)
SYSTEM	
Max. efficiency	99.0%
Europe efficiency	98.6%
IP rating	IP 20
Cooling	Temperature control forced-air cooling
FUNCTIONS	
Anti-PID and restoration	Optional
Dormancy function	Sleep at light load (< 220 KW), awake at heavy load (> 240 KW)
Soft start function	Available
AC direct parallel function	Available
Auxiliary power supply	AC, DC dual power input
SVG function	Available
PROTECTIONS	
DC overvoltage protection	Yes
DC overcurrent protection	Yes
Insulation resistance detection	Yes
AC overvoltage protection	Yes
AC output short-circuit protection	Yes
Ground fault detection	Yes
Overtemperature protection	Yes
Grid monitoring	Yes
OTHERS	
Operating temperature	– 30 ℃ ~ + 65 ℃ (> 55 ℃ derating)
Relative humidity	0 ~ 95% non-condensing
Altitude	4500 m (> 3000 m derating)
Dimensions (W x D x H) mm	1800 × 800 × 2000
Weight (kg)	1480

Disclaimer:  
• These data in this document are tested under specified conditions. It may result in difference between actual results and these data due to some uncertain factors. The statement about this product is for reference only. It makes no representation or warranty.  
• All specifications subject to change without notice.