HOPEWIND

GREEN UTILITY SOLUTION

PV Grid-tied Inverter

HSHV506K-G01





PRELIMINARY

FEATURES

Better Scenario Adaptability

- Supports installation with a horizontal tilt angle of 15°, suitable for floating scenarios
- Supports 1000m+ PLC communication, good adaptability to various terrains
- No derating at 40℃ , high temperature resistance, excellent stability
- Zero export design, precisely tailored for commercial and industrial applications

Safe & Reliable, Intelligent O&M

- IP66 protection, C5 anti-corrosion
- DC & AC terminal temperature detection for extra safety
- String-level AFCI arc fault detection, smart IV curve diagnosis
- Intelligent fan self-cleaning
- Anti-PlD and PID recovery for PV modules
- MPPT-level insulation fault location

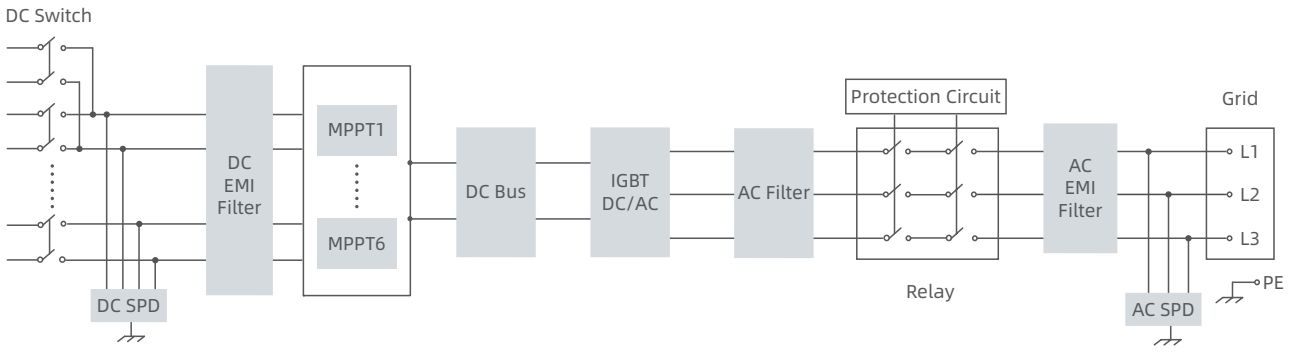
Lower LCOE

- 1500V DC/1000V AC design reduces system costs and line losses
- Supports large sub-arrays of 5MW+
- High-current solution with better module compatibility

Grid-friendly

- Leading PV grid-forming technology, industry's first GW-level application, testing and operation
- Full-power operation at SCR ≥1.05, strong adaptability to weak grids
- High/Low/Zero voltage ride-through

TOPOLOGICAL GRAPH



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PARAMETERS

Model	HSHV506K-G01
DC Input	
Max. Input Voltage	1500 V
Min. Operating Voltage/Starting Voltage	500 / 550 V
MPPT Voltage Range	500~1500 V
Max. Input Current Per MPPT	105 A
Max. Short-circuit Current	157.5 A
Number of DC Inputs	6 × 6
Number of MPP Trackers	6
AC Output	
Output Power	460 kW@45℃, 506 kW@40℃
Rated Output Voltage	1000 V (3W + PE)
Rated Voltage Range	850~1150 V
Max. Output Current	292.2 A
Rated Grid Frequency	50 / 60 Hz
Power Factor	>0.99 (0.8 leading~0.8 lagging)
Harmonic (THD)	<1% (at rated current)
DC Component Input (DCI)	<0.5% × 265.6 A
Efficiency	
Max. Efficiency	99.11%
Protection	
Surge Protection	DC type II (optional type I) / AC type II
Insulation Impedance Detection	Yes
MPPT-level Insulation Detection	Yes
Residual Leakage Current Detection	Yes
PV String Connection Detection	Yes
PV Reverse Polarity Protection	Yes
Anti-islanding Protection	Yes
Output Overcurrent Protection	Yes
DC & AC Terminal Temperature Detection	Yes
DC Switch	Yes
Optional	AFCI / PID / Anti-PID / SVG
General Parameters	
Dimensions (W × H × D)	1208 × 887 × 386 mm
Weight	≤140 kg
Protection Degree	IP66
Operating Temperature Range	-30~+60℃
Cooling System	Smart air cooling
Topology	Transformerless
Operating Altitude	5000 m (>4000 m derating)
Display	LED indicator, Wi-Fi + APP
Communication	PLC / RS485 / Wi-Fi (optional)
DC Connection Type	DC connector (4~6 mm^2)
AC Connection Type	OT / DT / DTL terminal (≤400 mm^2)

Note: The parameters depicted in the HSHV506K-G01 datasheet are preliminary version and shall not serve as a binding reference for product performance compliance. The final product specifications shall prevail per the actual shipped products.

PRELIMINARY

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