

SUNFOREST Series Central Commercial Inverter



Features

Advanced performance

- With the advanced system intelligence, highly speed MPPT technology, industrial-grade engineering and complete fault protections, Sunforest series central commercial inverters maximize system uptime and power production, even in harshest environments
- DSP-controlled IGBT circuitry to achieve high efficiency, reliability and low installing cost
- Sunforest KT series grid-tied inverters are integrated with an isolation transformer
- Sunforest KTL series grid-tied inverters have a max efficiency of 98.6% without a transformer
- Multiple work mode, SVG (Static Var Generator) mode, Anti-Reverse Power control mode

Optimal MPPT technology

- Rapid and accurate control boost PV plant KWH yield
- Provides a wide range of operation voltage

Utility-ready features

- Open communication protocol, compatible with any third-party monitoring system and easily integrated into SCADA systems
- Remote control of real and reactive power
- ZVRT (Zero voltage ride through)
- Power factor control
- Simplified grid interconnection

Increased PV plant yield

- Rapid and accurate MPPT control increases PV plant KWH yield by extending the production window of arrays, enabling them to operate at optimal voltage and current levels for longer periods of time-even in varied sunlight conditions to maximize efficiency and enable you to get the most from your investment

Safety

- Built-in DC and AC disconnected switches

Certificates

CQC, CNCA/CTS0004-2009A, CNCA/CTS0006-2010, Zero Voltage Ride Through

Technical data

Model (SUNFOREST)	50KT	75KT	100KT
-------------------	------	------	-------

Input (DC Side)

Max. DC input Power (kW)	58	87	115
Max. DC voltage (Vdc)	1000		
MPPT operating range (Vdc)	450~820 (start voltage 470Vdc)		
Number of parallel inputs	2		
Number of MPPT trackers	1		
Max. input current (A)	128	200	250

Output (AC Side)

Nominal output power (kW)	50	75	100
Max. output power (kW)	55	82.5	110
Nominal output current (A)	72	108	144
Max. output current (A)	80	120	158
Nominal AC output voltage (Vac)	400		
AC output voltage range (Vac)*	360~440		
AC grid frequency range (Hz)*	50±5		
Power factor (cosφ)	0.9 (leading)~0.9 (lagging)		
THDI	<3% (at nominal output power)		

Efficiency

Max. efficiency	96.5%	96.8%	97.1%
Euro. efficiency	95.8%	96.2%	96.4%
MPPT efficiency	99.9%	99.9%	99.9%

System

Operating temperature (°C)	-25~+60 (derated power above 50°C)		
Altitude (m)	6000 (derated power above 3000m)		
Noise (typical) [dB (A)]	≤65		
Consumption at night (W)	<100		
Electrical isolation	Transformer		
Cooling concept	Fan cooling		
Degree of protection	IP20		
Communication	RS485		
Dimension (W*D*H mm)	600*650*1450	650*700*1550	800*700*1700
Weight (kg)	520	650	810

*AC grid voltage range and frequency range depend on local standards.