

# 5KW hybrid single phase inverter

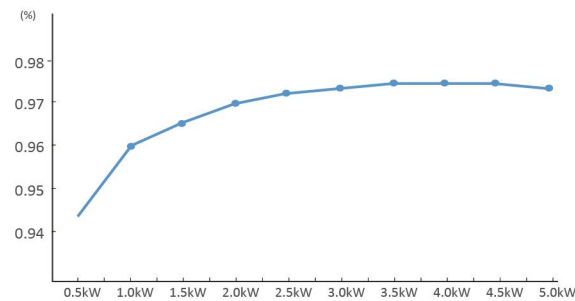


## Characteristics :

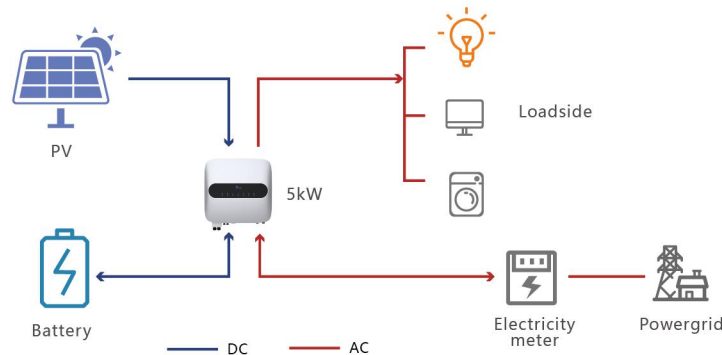
- On/off grid swith time < 10ms ; Inductive load ≤ 1.2kw ; Extra light weight < 25kg for simplify installation ;
- IP65 protection level, suitable for harsh environments such as high altitude, high temperature, high cold, and long-term continuous and reliable operation. The designed life is up to 25 years.
- Support grid-connected and off-grid unstopable switching; With the function of energy management, support unmanned autonomous operation without EMS.
- With flexible configuration, it can select photovoltaic/-mains charging modes and the buried Lithium battery, support Wi-Fi and GPRS wireless monitoring mode, and support multiple-unit parallel operation, convenient for expansion.

## Efficiency curve ▶

PV - GRID Efficiency Curve



## Topological graph ▶



Model	SMT-5K-TL-LV	SMT-5K-TL-HV
<b>PV parameters</b>		
Maximum output power	6000W	6000W
Maximum DC voltage	580V	580V
Maximum input current	11A/11A	11/11A
DC overcurrent protection	14A	14A
MPPT voltage range	125V~550V	125~550V
MPPT input circuit number	2	2
<b>Battery parameters</b>		
Battery type	Lithium battery	Lithium battery
Battery voltage range	40V~58V	80V~400V
Rated battery voltage	48V	300V
Maximum charge and discharge efficiency	95%/94%	95%/94%
Maximum charge and discharge current	70A/100A	70A/100A
<b>AC side parameters</b>		
Rated power grid power	5000W	5000W
Power grid voltage range	170V~280V	170V~280V
Rated power grid frequency	50/60Hz	50/60Hz
Maximum AC input/output current	22.8A/22.8A	22.8A/22.8A
Power factor	-0.8overexcited, 0.8underexcited	-0.8overexcited, 0.8underexcited
THDi	< 3%	< 3%
<b>Load side parameter</b>		
Rated power	5000W	5000W
Maximum output current	22.8A	22.8A
Overcurrent protection rated	21.7A	21.7A
Power factor	-0.8overexcited, 0.8underexcited	-0.8overexcited, 0.8underexcited
THDi	< 3%	< 3%
<b>Efficiency</b>		
MPPT power	99.9%	99.9%
European efficiency	97%	97%
Max. efficiency	97.6%	97.6%
<b>Conventional parameters</b>		
Size (width / height / thickness)	495*516*152mm	495*516*152mm
Weight	< 25kg	< 25kg
Operating temperature	-25°C~60°C	-25°C~60°C
Noise index	25dB	< 30dB
Relative humidity	0~95%	0~95%
Operating altitude	< 2000	< 2000
Cooling mode	Natural cooling	Natural cooling
Protection level	IP65	IP65
<b>Protective function</b>		
Anti-islanding protection	Yes	Yes
DC switch (PV)	Yes	Yes
Output overcurrent protection	Yes	Yes
Output overvoltage protection	Yes	Yes
Output short circuit protection	Yes	Yes
<b>Characteristics</b>		
Display	LED	LED
Communication interface	WIFI, RS485, GPRS	WIFI, RS485, GPRS
Quality guarantee	5	5