

Residential Hybrid Single Phase Inverter



FLEXIBLE APPLICATION

- 80~550V wide battery voltage range
- Supports parallel connection with full communication between inverters



ENERGY INDEPENDENCE

- Seamless transition to backup mode for protection against power outages
- Fast charging/discharging to meet the demand of higher consumption and



SMART MANAGEMENT

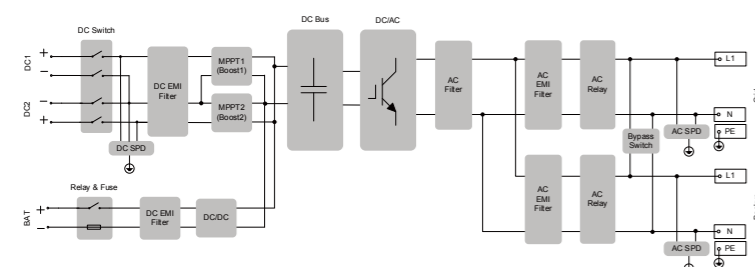
- High self-consumption with optimised built-in EMS
- Free online monitoring to enhance energy management for end user, installer and retailer
- Remote firmware update and customisable settings



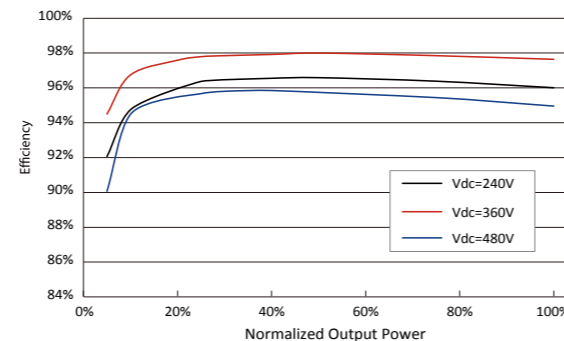
EASY INSTALLATION

- Touch free commissioning with smartphone
- Lightweight and compact

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SHORT)



Type designation	SH3.6RS	SH4.6RS	SH5.0RS	SH6.0RS
PV Input Side Data				
Max. PV input power	5500 W	6600 W	6600 W	8000 W
Max. PV input voltage	600 V			
Startup voltage	120 V			
Nominal input voltage	350 V			
MPP voltage range	90 V – 560 V			
MPP voltage range for nominal power	155 V – 520 V	195 V – 520 V	215 V – 520 V	250 V – 520 V
No. of MPPTs	2			
Max. number of PV strings per MPPT	1 / 1			
Max. PV input current	25 A (12.5 A / 12.5 A)			
Max. current for input connector	16 A			
Short-circuit current of PV input	32 A (16 A / 16 A)			
AC Input and Output Data				
Nominal AC output power	3680W	4600W	5000W	6000W
Nominal AC output current	16A	20A	21.7A	26.1A
Max. AC output apparent power	3680VA	4600VA	5000VA	6000VA
Max. AC output current	16A	21A	21.7A	27.3A
Nominal AC voltage	220/230/240Vac			
AC voltage range	176~276Vac (this may vary with grid standards)			
Nominal grid frequency	50Hz/60Hz			
Grid frequency range	45~55Hz/55~65Hz (this may vary with grid standards)			
THD	<3 % (of nominal power)			
DC current injection	<0.5 % (of nominal current)			
Power factor	>0.99 at default value at nominal power (adj. 0.8 overexcited/leading to 0.8 underexcited/lagging)			
Protection				
Anti-islanding protection	Yes			
AC short circuit protection	Yes			
Leakage current protection	Yes			
DC switch(solar)	Yes			
DC fuse(battery)	Yes			
Overvoltage Category	III [MAINS], II [PV] [BATTERY]			
Overvoltage Protection	DC Type II / AC Type II			
Battery Data				
Battery type	Li-ion battery			
Battery voltage	80V-550V			
Max charge / discharge current	25A/25A			
Max charge / discharge power	6600W			
System Data				
Max. European efficiency	> 97.1 %	> 97.3 %	97.3%	> 97.3 %
Max. charge / discharge efficiency	98.5%			
Isolation method (solar/battery)	Transformerless/Transformerless			
Ingress protection rating	IP65			
Operating ambient temperature range	-25 °C~60 °C (>45 °C derating)			
Allowable relative humidity range	0%~100%			
Cooling method	Natural convection			
Max. operating altitude	4000m (>2000m derating)			
Noise	<30dB			
Display	LED, Graphic LCD			
Communication	RS485, Wi-Fi, Ethernet / 1 × Digital Output			
DC connection type	MC4 (PV) / Sunclix (Battery)			
AC connection type	Spring-cage terminal			
Mechanical Data				
Dimensions (W * H * D)	460 mm * 543 mm * 163 mm			
Mounting method	Wall-mounting bracket			
Weight	20 kg			
Backup Data				
Nominal voltage	220Vac/230Vac/240Vac (±2%)			
Frequency range	50Hz/60Hz (±0.2%)			
Total harmonic factor output voltage	2% (full resistive load)			
Switch time to emergency mode	<20ms			
Nominal output power	3680W/3680VA	4600W/4600VA	5000W/5000VA	6000W/6000VA
Nominal output current	16.8A	21A	21.7A	27.3A
Peak output power	6000W/6000VA , continuous6600VA , 10s	6000W/6000VA , continuous6600VA , 10s	6000W/6000VA , continuous6600VA , 10s	6000VA , 10s
Peak output current	28.7A			
Max. parallel connection units	Yes			

