

SH8.0/10RS

Residential Hybrid Single Phase Inverter



FULL BACKUP

- Built-in 63A bypass for full house backup
- 10ms seamless switch
- Peak output up to 13680VA(10s) in backup mode



FLEXIBLE APPLICATION

- Up to 200% PV input with 4 MPPTs
- 50A fast charge / discharge current
- VPP Ready



FRIENDLY INSTALLATION

- Plug & Play installation
- Free online monitoring to enhance energy management



SAFE AND DURABLE

- Support precise AFCI
- IP65/C5



Type designation	SH8.0RS		SH10RS	
Input (DC)				
Recommended max. PV input power	16000 Wp		20000 Wp	
Max. PV input voltage			600 V	
Min. PV input voltage / Startup input voltage			40 V / 50 V	
Rated PV input voltage			360 V	
MPPT voltage range*			40 V – 560 V	
No. of independent MPP trackers			4	
No. of PV strings per MPPT			1 / 1 / 1 / 1	
Max. PV input current			64 A (16 A / 16 A / 16 A / 16 A)	
Max. DC short-circuit current			80 A (20 A / 20 A / 20 A / 20 A)	
Battery data				
Battery type			Li-ion battery	
Battery voltage range			80 V – 460 V	
Max. charge / discharge current			50 A ** / 50 A **	
Max. charge / discharge power			10000 W / 10000 W	
Input and output (AC)				
Max. AC power from grid			14500 VA***	
Rated AC output power	8000 W			9999 W
Max. AC output apparent power	8000 VA			9999 VA
Max. AC output current	36.4 A			45.5 A
Rated AC voltage	1 / N / PE, 220 V / 230 V / 240V			
AC voltage range	154 V – 276 V			
Rated grid frequency	50 Hz / 60 Hz			
Grid frequency range	45Hz - 55 Hz / 55 Hz - 65 Hz			
Harmonic (THD)	< 3 % (of rated power)			
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging			
Feed-in phases / Connection phases	1 / 1			
Backup data (on grid mode)				
Max. output power for backup load			14500 W***	
Max. output current for backup load			63 A	
Backup data (off-grid mode)				
Rated voltage	1 / N / PE, 220 V / 230 V / 240 V (± 2 %)			
Rated frequency	50 Hz / 60 Hz (± 0.2 %)			
THDV(@Linear load)	< 2 %			
Backup switch time	< 10 ms			
Rated output power	8000W / 8000VA			10000W / 10000VA
Peak output power	13680 VA, 10 s			
Efficiency				
Max. efficiency / European efficiency	97.4 % / 96.8 %		97.5 % / 97.1 %	
Protection & Function				
Grid monitoring			Yes	
DC reverse polarity protection			Yes	
AC short-circuit protection			Yes	
Leakage current protection			Yes	
DC switch (solar)			Yes	
Surge Protection			DC Type II / AC Type II	
PID Zero			Yes	
Battery input reverse polarity protection			Yes	
General data				
Topology (solar / battery)	Transformerless / Transformerless			
Degree of protection	IP65			
Dimensions (W * H * D)	605 mm * 435 mm * 181 mm			
Weight	29 kg			
Mounting method	Wall-mounting bracket			
Operating ambient temperature range	-25 °C to 60 °C			
Allowable relative humidity range(Non-condensing)	0 % - 100 %			
Cooling method	Natural convection			
Max. operating altitude	4000 m			
Noise (Typical)	35 dB (A)			
Display	LED digital display and LED indicator			
Communication	RS485, WLAN, Ethernet, CAN			
DI / DO	DI * 4 / DO * 2 / DRM0			
DC connection type	MC4 (PV, Max.6mm²) / Plug and play connector (battery, Max.10mm²)			
AC connection type	Plug and play connector (Max.16mm²)			
Compliance	IEC 62109-1, IEC 62109-2, IEC 62477-1, IEC61000-6-1/-2/-3/-4, IEC62920, EN55011, CISPR 11, AS/NZS 4777.2:2020, NRS 097			
Country of manufacture	China			

* Please refer to the user manual for the full load MPPT voltage range

** Depending on the connected battery

***Please refer to the user manual and modify the settings based on actual load power

