

SH8.0 - 10RS

Residential Hybrid Single Phase Inverter



FLEXIBLE APPLICATION

- 200%DC/AC PV input 16A*4MPPTs
- Ideal for both new installation and retrofit scenario
- Built-in smart PID recovery function



SMART MANAGEMENT

- Real time data (10 seconds refresh sample)
- 24 / 7 live monitoring both online and with integrated display
- Online IV curve scan and diagnosis



ENERGY INDEPENDENCE

- Seamless transition to backup mode, for protection against power outages
- Fast Charging or discharging, enabling higher self-consumption results
- Built-in EMS with advanced customization



USER FRIENDLY

- Plug and play installation
- iSolarCloud monitoring available on App and Web
- Whole home backup available



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
MPP voltage range		40 V – 560 V
No. of independent MPP inputs		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)
Max. current for input connector		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	10000 W
Max. AC output apparent power	8000 VA	10000 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 / 60Hz
Grid frequency range		45 Hz – 55 Hz / 55 Hz – 65 Hz
Harmonic (THD)		< 3 % (at 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-N-PE
Backup data (on grid mode)		
Rated output power for backup load		14500 W
Rated output current for backup load		63 A
Backup data(off-grid mode)		
Rated voltage		1 / N / PE, 220 V / 230 V / 240V (± 2 %)
Rated grid frequency		50 Hz / 60Hz (± 2 %)
Output voltage harmonic (THD)		< 2 %
Switch time to emergency mode		< 10 ms
Rated output power	8000 W / 8000 VA	10000 W / 10000 VA
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		
On-grid parallel		Master-slave mode
Battery input reverse polarity protection		Yes
AFCI		Yes
IV scan and diagnosis		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

*Depending on the connected battery



Type designation	SH8.0RS	SH10RS
Operating ambient temperature range	- 25 °C – 60 °C	
Allowable relative humidity range (non-condensing)	0 % – 100 %	
Cooling method	Natural cooling	
Max. operating altitude	4000 m	
Noise (typical)	45 dB (A)	
Display	LED digital display and LED indicator	
Communication	RS485, WLAN, Ethernet, CAN	
DI / DO	DI * 1 / DO * 2 / DRM	
DC connection type	MC4 (PV) / Plug and play connector (battery)	
AC connection type	Plug and play connector	
Grid compliance	IEC 62109-1:2010, IEC 62109-2, IEC 62477-1, IEC61000-6-1/-2/-3/-4, IEC62920, EN55011, CISPR 11, AS/NZS 4777.2:2020	

* Depending on the connected battery

