

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.6mm ²) / Plug and play connector (battery, Max.10mm ²)
AC connection type		Plug and play connector (Max.16mm ²)
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

