

SH3.0/3.6/4.0/5.0/6.0RS

Residential Hybrid Single Phase Inverter

NEW



FLEXIBLE APPLICATION

- 80~460 V wide battery voltage range
- Ideal for both retrofitting and new installations
- Built-in smart PID recovery function



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 SETUP

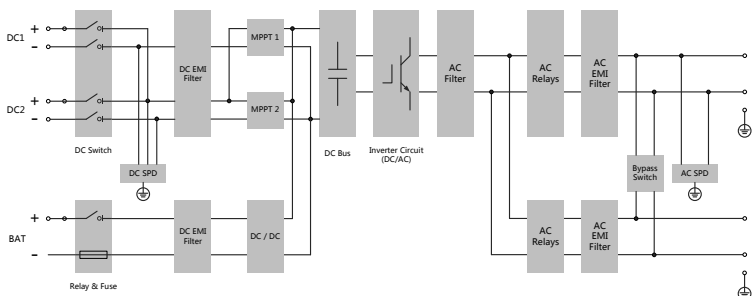
- Plug and play installation *
- iSolarCloud monitoring available on App and Web
- Lightweight and compact, optimized for heat-dissipation



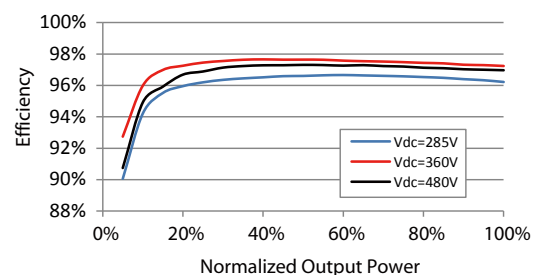
SMART MANAGEMENT

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

CIRCUIT DIAGRAM



EFFICIENCY CURVE



| Type designation | SH3.0RS | SH3.6RS | SH4.0RS | SH5.0RS | SH6.0RS |
|--|---|------------------|------------------|------------------|------------------|
| Input (DC) | | | | | |
| Recommended max. PV input power | 10000 Wp | 10700 Wp | 11000 Wp | 12000 Wp | 13000 Wp |
| Max. PV input voltage | 600 V | | | | |
| Min. operating PV voltage / Start-up input voltage | 40 V / 50 V | | | | |
| Rated PV input voltage | 360 V | | | | |
| MPP voltage range | 40V – 560 V | | | | |
| No. of independent MPP inputs | 2 | | | | |
| Default No. of PV strings per MPPT | 1 | | | | |
| Max. PV input current | 32 A (16 A/16 A) | | | | |
| Max. DC short-circuit current | 40 A (20 A/20 A) | | | | |
| Input / Output (AC) | | | | | |
| Max. AC input power from grid | 10000 VA | 10700 VA | 11000 VA | 12000 VA | 13000 VA |
| Rated AC output power | 3000 W | 3680 W | 4000 W | 5000 W** | 6000 W |
| Max. AC output power | 3000 VA | 3680 VA | 4000 VA | 5000 VA** | 6000 VA |
| Rated AC output apparent power | 3000 VA | 3680 VA | 4000 VA | 5000 VA** | 6000 VA |
| Rated AC output current (at 230 V) | 13.1 A | 16 A | 17.4 A | 21.8 A*** | 26.1 A |
| Max. AC output current | 13.7 A | 16 A | 18.2 A | 22.8 A*** | 27.3 A |
| Rated AC voltage | 220 / 230 / 240 V | | | | |
| AC voltage range | 154 V – 276 V | | | | |
| Rated grid frequency / | 50 Hz / 45 – 55 Hz | | | | |
| Grid frequency range | 60 Hz / 55 – 65 Hz | | | | |
| Harmonic (THD) | <3 % (of rated power) | | | | |
| Power factor at rated power / | >0.99 at default value at rated power | | | | |
| Adjustable power factor | (adj. 0.8 overexcited/leading to 0.8 underexcited/lagging) | | | | |
| Feed-in phases / connection phases | 1 / 1 | | | | |
| Efficiency | | | | | |
| Max. efficiency / European efficiency | 97.4 % / 97.0 % | 97.5 % / 97.1 % | 97.6 % / 97.2 % | 97.7 % / 97.3 % | 97.7 % / 97.3 % |
| Protection & Function | | | | | |
| Grid monitoring | Yes | | | | |
| DC reverse polarity protection | Yes | | | | |
| AC short circuit protection | Yes | | | | |
| Leakage current protection | Yes | | | | |
| Surge Protection | DC Type II / AC Type II | | | | |
| DC switch(solar) | Yes | | | | |
| DC fuse(battery) | Yes | | | | |
| PID recovery function | Yes | | | | |
| Battery input reverse polarity protection | Yes | | | | |
| Battery Data | | | | | |
| Battery type | Li-ion battery | | | | |
| Battery voltage | 80 V – 460 V | | | | |
| Max charge / discharge current | 30 A / 30 A | | | | |
| Max charge / discharge power | 6600 W | | | | |
| General Data | | | | | |
| Dimensions (W * H * D) | 490 * 340 * 170 mm | | | | |
| Weight | 18.5 kg | | | | |
| Mounting method | Wall-mounting bracket | | | | |
| Topology (Solar / Battery) | Transformerless / Transformerless | | | | |
| Degree of protection | IP65 | | | | |
| Operating ambient temperature range | -25 °C to 60 °C | | | | |
| Allowable relative humidity range | 0 % – 100 % | | | | |
| Cooling method | Natural convection | | | | |
| Max. operating altitude | 4000 m | | | | |
| Display | LED digital display & LED indicator | | | | |
| Communication | RS485 / Ethernet / WLAN / CAN | | | | |
| DI / DO | DI * 4 / DO * 1 / DRM | | | | |
| DC connection type | MC4 (PV) / Sunclix (Battery) | | | | |
| AC connection type | Plug and Play **** | | | | |
| Grid compliance | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-3-11, IEC/EN 61000-3-12, EN 62477-1, AS/NZS 4777.2:2020, EN 50549-1, CEI 0-21, G98 / G99 | | | | |
| Country of manufacture | China | | | | |
| Backup Data (on grid mode) | | | | | |
| Rated output power for backup load | 6000 W | | | | |
| Rated output current for backup load | 27.3 A | | | | |
| Backup Data (off-grid mode) | | | | | |
| Rated voltage | 220 V / 230 V / 240 V (±2 %) | | | | |
| Frequency range | 50 Hz / 60 Hz (±0.2 %) | | | | |
| Total output THDv for linear load | < 2 % | | | | |
| Switch time to emergency mode | < 10 ms | | | | |
| Rated output power | 3000 W / 3000 VA | 3680 W / 3680 VA | 4000 W / 4000 VA | 5000 W / 5000 VA | 6000 W / 6000 VA |
| Peak output power | 8400 VA, 10s | | | | |

* Country code needs to be set before grid connection

** AS4777.2 4999W,4999VA

*** AS 4777.2:Rated and Max. AC current is 21.7A

**** AC Connector brand is Phoenix Contact and compatible brand

