


# S450S/S800S/S1000S/S1600S
## Microinverter

### HIGH YIELD
- Long operation with higher yield
- Effective heat dissipation via specially manufactured rear side

### SMART O&M
- Identify installation problems by smart detection

### EASY INSTALLATION
- DC MC4 terminals and AC busbar clamp terminals
- Perfect cable length to cover all scenarios
- One click settings for all

### SAFE & RELIABLE
- 100% meet safety requirements
- No high DC voltage, No arc risk
- Harsh enviroment protection IP67 & C5

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SUNGROW
Clean power for all

| Type designation | S450S | S800S | S1000S | S1600S |
|---|---|---|---|---|
| **Input ( DC )** | | | | |
| Recommended PV module power range | 375 W - 570 W | 375 W - 570 W | 375 W - 650 W | 375 W - 570 W |
| Max. PV input voltage | 60 V | | | |
| Min. PV input voltage / Startup input voltage | 16 V / 22 V | | | |
| MPPT voltage range * | 16 V - 60 V | | | |
| No. of independent MPP inputs | 1 | 2 | 2 | 4 |
| Max. PV input current | 16 A * 1 | 16 A * 2 | 16 A * 2 | 16 A * 4 |
| Max. DC short-circuit current | 20 A * 1 | 20 A * 2 | 20 A * 2 | 20 A * 4 |
| **Output ( AC )** | | | | |
| Grid Type | Single phase | | | |
| Rated AC output power | 450 W | 800 W | 1000 W | 1600 W |
| Max. AC output apparent power | 450 VA | 800 VA | 1000 VA | 1600 VA |
| Max. AC output current | 2.1 A | 3.6 A | 4.6 A | 7.3 A |
| Rated AC output current ( at 230 V ) | 2.0 A | 3.5 A | 4.4 A | 7.0 A |
| Rated AC voltage | 220 V / 230 V / 240 V | | | |
| AC voltage range ** | 154 V - 277 V | | | |
| Rated grid frequency | 50 Hz / 60 Hz | | | |
| Grid frequency range | 45 Hz - 55 Hz<br>55 Hz - 65 Hz | | | |
| Harmonic ( THD ) | < 5 % ( at rated power ) | | | |
| Power factor at rated power / Adjustable power factor | > 0.99 / 0.8 leading - 0.8 lagging | | | |
| Maximum units per branch ( 2.5 mm² ) *** | 10 | 6 | 5 | 3 |
| **Efficiency** | | | | |
| Max. efficiency | 96.2% | | | |
| European efficiency | 95.4% | | | |
| **Protection & function** | | | | |
| Grid monitoring | Yes | | | |
| Leakage current protection | Yes | | | |
| PV module-level monitoring | Yes | | | |
| Rapid shutdown | Yes | | | |
| Surge protection | AC type II | | | |
| **General data** | | | | |
| Dimensions ( W * H * D ) | 238 * 168 * 42 mm | 265 * 226 * 42 mm | 265 * 226 * 42 mm | 361 * 271 * 55 mm |
| Weight | 2.5 kg | 3.5 kg | 3.5 kg | 7.5 kg |
| Mounting method | Bracket Mounted | | | |
| Topology | High Frequency Transformers | | | |
| Degree of protection | IP67 | | | |
| Night power consumption | < 50 mW | | | |
| Operating ambient temperature range | -40 °C - 65 °C | | | |
| Allowable relative humidity range ( non-condensing ) | 100 % | | | |
| Cooling method | Natural cooling | | | |
| Max. operating altitude | 2000 m | | | |
| Display | LED | | | |
| Communication | WLAN | | | |
| DC connection type | Stäubli MC4 | | | |
| AC connection type | Plug and play connector | | | |
| Certification compliance | EN / IEC 62109 -1/-2, EN / IEC 61683, EN50530, EN / IEC 61000 -6 -1/-2/-3/-4, VDE 4105, VDE 0126, UNE217002, CEI0-21, IEC 60529, IEC62116, EN50549, PSE RFG, EN 301489, EN 300328, EN / IEC 62311, ETSI EN 303 645 | | | |

* Please refer to the user manual for the full load MPPT voltage range.
** Voltage could vary within the supporting range according to the application scenario.
*** Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

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