

Three Phase Hybrid Inverter

SolarAll-H  
10-20kW

SolarAll-H Series 10kW-20kW inverter is a new generation of photovoltaic energy storage inverter integrates many functions such as charging, energy storage, photovoltaic, BMS battery management system and so on. It can automatically identify the offgrid/grid connection mode and connect to the smart grid to achieve peak loadand valley demand.



Higher Reliability

- IP65 Outdoor & Indoor use
- Natural Cooling, Ultra Silence
- SiC Technology, Longer Lifespan
- Plug-in Design, Easy to Install

High Flexibility

- 15 Units in Parallel
- Support AC Coupled
- 2 Independent Ports for Battery
- Support Mixture use of Old & New Battery

Smart Monitoring

- Auto Sleep
- VPP Interface Ready
- Cloud + Smart Data Analysis

Strong Load Adaptability

- UPS Function
- Flexible DO Control
- 10ms On/Off-Grid Switchover
- 100% Three Phase Unbalance

Technical Specifications

| Hybrid Inverter Model                        | SAHT10                                                                                                                                                                                                                                                                                                    | SAHT12   | SAHT15   | SAHT20   |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|
| Off-Grid Output                              |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Nominal Output Power                         | 10kW                                                                                                                                                                                                                                                                                                      | 12kW     | 15kW     | 20kW     |
| Nominal Voltage                              | 3/N/PE, 220/380VAC, 230/400VAC                                                                                                                                                                                                                                                                            |          |          |          |
| Nominal Frequency                            | 50/60Hz                                                                                                                                                                                                                                                                                                   |          |          |          |
| Nominal Output Current                       | 15A                                                                                                                                                                                                                                                                                                       | 18A      | 22.5A    | 30A      |
| Output THDu                                  | <3%                                                                                                                                                                                                                                                                                                       |          |          |          |
| On-Grid Parameter                            |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Nominal Output Power                         | 10kW                                                                                                                                                                                                                                                                                                      | 12kW     | 15kW     | 20kW     |
| Max. Output Power                            | 11kVA                                                                                                                                                                                                                                                                                                     | 13.2kVA  | 16.5kVA  | 22kVA    |
| Max. Input Power from Grid                   | 20kVA                                                                                                                                                                                                                                                                                                     | 24kVA    | 30kVA    | 40kVA    |
| Max. Input Current from Grid                 | 30A                                                                                                                                                                                                                                                                                                       | 35A      | 44A      | 60A      |
| Max. Output Current                          | 16A                                                                                                                                                                                                                                                                                                       | 20A      | 24A      | 32A      |
| Nominal Grid Voltage                         | 3/N/PE, 220/380VAC, 230/400VAC, 240/415V                                                                                                                                                                                                                                                                  |          |          |          |
| Grid Voltage Range                           | 184-276V/320-480V                                                                                                                                                                                                                                                                                         |          |          |          |
| PV Input                                     |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Max. Input Power                             | 15000Wp                                                                                                                                                                                                                                                                                                   | 18000Wp  | 22500Wp  | 30000Wp  |
| Max. Input Voltage                           | 1000V                                                                                                                                                                                                                                                                                                     |          |          |          |
| Number of MPPTs                              | 2                                                                                                                                                                                                                                                                                                         |          |          |          |
| Max. Input String Per MPPT                   | 2                                                                                                                                                                                                                                                                                                         |          |          |          |
| MPPT Voltage Range                           | 180-960V                                                                                                                                                                                                                                                                                                  |          |          |          |
| Full Load MPPT Voltage Range                 | 15000Wp                                                                                                                                                                                                                                                                                                   | 18000Wp  | 22500Wp  | 30000Wp  |
| Nominal Input Voltage                        | 600                                                                                                                                                                                                                                                                                                       |          |          |          |
| Starting Voltage                             | 200V                                                                                                                                                                                                                                                                                                      |          |          |          |
| Max. Input Current                           | 25A/25A                                                                                                                                                                                                                                                                                                   |          |          |          |
| Short-Circuit Current                        | 30A/30A                                                                                                                                                                                                                                                                                                   |          |          |          |
| Battery Parameter                            |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Battery Type                                 | Lithium-ion                                                                                                                                                                                                                                                                                               |          |          |          |
| Number of Battery Input                      | 2                                                                                                                                                                                                                                                                                                         |          |          |          |
| Battery Voltage Range                        | 160-800V                                                                                                                                                                                                                                                                                                  |          |          |          |
| Full Load Battery Voltage Range              | 210-800V                                                                                                                                                                                                                                                                                                  | 250-800V | 300-800V | 400-800V |
| Peak Charging/Discharging Current & Duration | 35A/35A (60s)                                                                                                                                                                                                                                                                                             |          |          |          |
| Max. Charging/Discharging Current            | 25A/25A                                                                                                                                                                                                                                                                                                   |          |          |          |
| Efficiency                                   |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Max. Efficiency                              | 98.2%                                                                                                                                                                                                                                                                                                     |          |          |          |
| European Efficiency                          | 97.7%                                                                                                                                                                                                                                                                                                     |          |          |          |
| Max. Battery Charging/Discharging Efficiency | 97.8%                                                                                                                                                                                                                                                                                                     |          |          |          |
| General Data                                 |                                                                                                                                                                                                                                                                                                           |          |          |          |
| Size (WxHxD)                                 | 573 x 509 x 219                                                                                                                                                                                                                                                                                           |          |          |          |
| Weight                                       | 35kg                                                                                                                                                                                                                                                                                                      |          |          |          |
| Noise                                        | <45dB(A)                                                                                                                                                                                                                                                                                                  |          |          |          |
| Operating Temperature Range                  | -25C ~ +60C                                                                                                                                                                                                                                                                                               |          |          |          |
| Cooling Method                               | Air Cooling                                                                                                                                                                                                                                                                                               |          |          |          |
| Ingress Protection Grade                     | IP65                                                                                                                                                                                                                                                                                                      |          |          |          |
| Monitoring                                   | LED/APP/WIFI/4G/Bluetooth                                                                                                                                                                                                                                                                                 |          |          |          |
| Communication Port                           | RS485/CAN/DRED/DO/Parallel Port                                                                                                                                                                                                                                                                           |          |          |          |
| Protection                                   | DC Switch, PV Insulation Resistance, Residual Current Monitoring, Anti-islanding Protection, Reverse Polarity Protection (PV&Battery), AC Short Circuit Protection, AC Overcurrent Protection, AC Overvoltage Protection: LEVEL III: PV&Battery: LEVEL II, Surge Protection, Lightning Protection TYPE II |          |          |          |
| Certification                                |                                                                                                                                                                                                                                                                                                           |          |          |          |
| CE_LVD                                       | IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2                                                                                                                                                                                                                                                          |          |          |          |
| CE EMC                                       | EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4                                                                                                                                                                                                                                                        |          |          |          |
| Grid                                         | VDE-AR-N 4105, VDE V 0126-1-1, C10-11, G99, CEI 0-21, EN50549, NRS 097-2-1, AS 4777.2, R25, UNE217001, UNE217002, NTS 2.1                                                                                                                                                                                 |          |          |          |

Highlights



HIGHER  
RELIABILITY



HIGH  
FLEXIBILITY



SMART  
MONITORING



STRONG LOAD  
ADAPTABILITY