

# SJ15/20/25T

Hybrid Three Phase Inverter



## FULL BACKUP

- Built-in 63 A bypass for whole home backup
- 10 ms seamless switch
- Peak output up to 36500 VA ( 10 s ) in backup mode ( SH25T )



## FLEXIBLE APPLICATION

- Support 100 % unbalance output in backup and on grid mode
- Max. 16 A DC input current per string
- 50 A fast charge / discharge current



## FRIENDLY INSTALLATION

- Plug & Play installation
- Quiet operation for indoor or outdoor installation



## SAFE AND DURABLE

- Support precise AFCI
- IP65/C5

| Type designation                                      | SJ15T   | SJ20T  | SJ25T                        |
|---|---|--|------------------------------|
| <b>Input (DC)</b>                                     |   |  |                              |
| Max. PV input power                                   | 30000 Wp  | 40000 Wp   | 50000 Wp                     |
| Max. PV input voltage *                               |   | 1000 V   |                              |
| Min. PV input voltage / Startup input voltage         |   | 150 V / 180 V  |                              |
| Rated PV input voltage                                |   | 600 V  |                              |
| MPPT operating voltage range **                       |   | 150 V - 950 V  |                              |
| No. of independent MPP trackers                       |   | 3  |                              |
| No. of PV strings per MPPT                            |   | 2 / 2 / 1  |                              |
| Max. PV input current                                 |   | 80 A ( 32 A / 32 A / 16 A )                                |                              |
| Max. DC short-circuit current                         |   | 100 A ( 40 A / 40 A / 20 A )                               |                              |
| Max. current for input connector                      |   | 30 A   |                              |
| <b>Battery data</b>                                   |   |  |                              |
| Battery type  |   | Li-ion battery   |                              |
| Battery voltage range                                 |   | 100 V - 700 V  |                              |
| Max. charge / discharge current ***                   |   | 50 A / 50 A  |                              |
| Max. charge / discharge power                         | 30000 W / 15000 W   | 30000 W / 20000 W  | 30000 W / 25000 W            |
| <b>Input and Output (AC)</b>                          |   |  |                              |
| Max. AC power from grid ****                          |   | 43000 VA   |                              |
| Rated AC output power                                 | 15000 W   | 20000 W  | 25000 W                      |
| Max. AC output apparent power                         | 15000 VA  | 20000 VA   | 25000 VA                     |
| Max. AC output current                                | 22.8 A  | 30.4 A   | 37.9 A                       |
| Rated AC voltage                                      |   | 3 / N / PE, 220 V / 380 V ; 230 V / 400 V; 240 V / 415 V   |                              |
| AC voltage range                                      |   | 270 V - 480 V  |                              |
| Rated grid frequency                                  |   | 50 Hz / 60 Hz  |                              |
| Grid frequency range                                  |   | 45 Hz - 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 to 0.8 lagging                        |                              |
| Feed-in phases/connection phases                      |   | 3 / 3-N-PE   |                              |
| <b>Backup data (on grid mode)</b>                     |   |  |                              |
| Max. output power for backup load ****                |   | 43000 W  |                              |
| Max. output current for backup load                   |   | 3 * 63 A   |                              |
| <b>Backup data (off-grid mode)</b>                    |   |  |                              |
| Rated voltage   |   | 3 / N / PE, 220 / 380 V; 230 / 400 V; 240 / 415 V ( ± 2 %) |                              |
| Rated frequency                                       |   | 50 Hz / 60 Hz ( ± 0.2 % )                                  |                              |
| THDV(@Linear load)                                    |   | < 2 %  |                              |
| Backup switch time                                    |   | < 10 ms  |                              |
| Rated output power                                    | 15000 W / 15000 VA  | 20000 W / 20000 VA   | 25000 W / 25000 VA           |
| Peak output power *****                               | 25500 W /<br>25500 VA , 10 s  | 32000 W /<br>32000 VA , 10s                                | 36500 W /<br>36500 VA , 10 s |
| <b>Efficiency</b>                                     |   |  |                              |
| Max. efficiency / European efficiency                 | 98.1 % / 97.6 %   |  | 98.2 % / 97.8 %              |
| <b>Protection &amp; Function</b>                      |   |  |                              |
| 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  |                              |
| <b>General data</b>                                   |   |  |                              |
| Topology (solar / battery)                            |   | Transformerless / Transformerless                          |                              |
| Degree of protection                                  |   | IP65   |                              |
| Protective class                                      |   | Protective class I   |                              |
| Overvoltage category                                  |   | III[AC]; II[PV]; [BATTERY]                                 |                              |
| Active anti-islanding method                          |   | Frequency shift  |                              |
| Dimensions (W * H * D)                                |   | 620 mm * 480 mm * 245 mm                                   |                              |
| Weight  | 38 kg   |  | 40 kg                        |
| Mounting method                                       |   | Wall-mounting bracket                                      |                              |
| Operating ambient temperature range                   |   | -25 °C - 60 °C   |                              |
| Allowable relative humidity range(Non-condensing)     |   | 0 % - 100 %  |                              |
| Cooling method  | Natural convection  |  | Fan cooling                  |
| Max. operating altitude                               |   | 2000 m   |                              |
| Noise(Typical)  | 35 dB ( A )   |  | 50 dB ( A )                  |
| Display   |   | LED  |                              |
| Communication   |   | RS485, WLAN, Ethernet, CAN                                 |                              |
| DI / DO   |   | DI * 4 / DO * 2 / DRMO                                     |                              |
| DC connection type                                    | Plug and play connector ( PV, Max.6mm <sup>2</sup> / battery, Max.10mm <sup>2</sup> )   |  |                              |
| AC connection type                                    | Plug and play connector ( Max.16 mm <sup>2</sup> )  |  |                              |
| Compliance  | IEC / EN 62109, IEC 61000-6, EN 62477-1, IEC 61727, IEC 62116, IEC 62920, EN 55011, CISPR 11, VDE-AR-N-4105, EN 50549-1, NRS 097, AS/NZS 4777.2:2020, TOR Type A, R25, CEI 0-21 |  |                              |
| Country of manufacture                                | China   |  |                              |

\* Input voltage exceeding the MPPT operating voltage range triggers inverter protection \*\* 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 \*\*\*\*\* Can be reached only if PV and battery power is sufficient