

# H2 10-30K Three Phase Hybrid Inverter

SAJ's latest hybrid inverter supported easy setting of smart working modes, UPS 10ms switch time and 1C VPP charging/discharging speed of battery. H2 covers 10-30kW, 3MPPTs and three phase grid.



- ❑ Easy setting of smart working modes
- ❑ DC 20A string matched with ultra high PV modules
- ❑ Supported three phase voltage imbalance
- ❑ Battery fast charging/ discharging supported
- ❑ 150% DC oversizing
- ❑ With backup switch time  $\leq 10\text{ms}$

H2-10K-T3-AU | H2-12K-T3-AU | H2-15K-T2-AU  
H2-15K-T3-AU | H2-20K-T2-AU | H2-20K-T3-AU  
H2-25K-T3-AU | H2-30K-T3-AU

| MODEL                                     | H2-10K-T3-AU                                                                                                                                                                                                   | H2-12K-T3-AU | H2-15K-T2-AU | H2-15K-T3-AU | H2-20K-T2-AU | H2-20K-T3-AU | H2-25K-T3-AU | H2-30K-T3-AU |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| DC Input                                  |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Max. PV Array Power [Wp]@STC              | 20000                                                                                                                                                                                                          | 24000        | 30000        | 30000        | 30000        | 40000        | 45000        | 45000        |
| Max. DC Voltage [V]                       | 1000                                                                                                                                                                                                           |              |              |              |              |              |              |              |
| MPPT Voltage Range [V]                    | 180 ~ 900                                                                                                                                                                                                      |              |              |              |              |              |              |              |
| Rated DC Voltage [V]                      | 600                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Start Voltage [V]                         | 180                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Max. DC Input Current [A]                 | 40/40/40                                                                                                                                                                                                       |              | 40/40        | 40/40/40     |              | 40/40        | 40/40/40     |              |
| Max. DC Short Circuit Current [A]         | 50/50/50                                                                                                                                                                                                       |              | 50/50        | 50/50/50     |              | 50/50        | 50/50/50     |              |
| No. of MPPT                               | 3                                                                                                                                                                                                              |              | 2            | 3            |              | 2            | 3            |              |
| Number of String per MPPT Tracker         | 2/2/2                                                                                                                                                                                                          |              | 2/2          | 2/2/2        |              | 2/2          | 2/2/2        |              |
| Over voltage Category (OVC)               | II                                                                                                                                                                                                             |              |              |              |              |              |              |              |
| Battery Parameters                        |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Battery Type                              | LiFePO4                                                                                                                                                                                                        |              |              |              |              |              |              |              |
| Battery Voltage Range [V]                 | 180 ~ 800                                                                                                                                                                                                      |              |              |              |              |              |              |              |
| Max. Charging/Discharging Current [A]     | 50/50                                                                                                                                                                                                          |              |              |              |              |              |              |              |
| No. of BAT                                | 2                                                                                                                                                                                                              |              |              |              |              |              |              |              |
| Over voltage Category (OVC)               | II                                                                                                                                                                                                             |              |              |              |              |              |              |              |
| AC Output [On-grid]                       |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Rated AC Power [W]                        | 9999                                                                                                                                                                                                           | 12000        | 15000        | 15000        | 20000        | 20000        | 25000        | 29999        |
| Max. Apparent Power [VA]                  | 9999                                                                                                                                                                                                           | 13200        | 16500        | 16500        | 22000        | 22000        | 27500        | 29999        |
| Rated Output Current [A]@230Vac           | 14.5                                                                                                                                                                                                           | 17.4         | 21.8         | 21.8         | 29.0         | 29.0         | 36.3         | 43.4         |
| Max. Output Current [A]                   | 14.5                                                                                                                                                                                                           | 19.2         | 24.0         | 24.0         | 31.9         | 31.9         | 39.9         | 43.4         |
| Rated AC Voltage/Range [V]                | 3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/312 ~ 485                                                                                                                                                        |              |              |              |              |              |              |              |
| Rated Output Frequency/Range [Hz]         | 50, 60/45~55, 55~65                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Power Factor [cos φ]                      | 0.8 leading ~ 0.8 lagging                                                                                                                                                                                      |              |              |              |              |              |              |              |
| Total Harmonic Distortion [THDi]          | <3%                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Over voltage Category (OVC)               | III                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| AC Input [On-grid]                        |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Rated AC Voltage/Range [V]                | 3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/312 ~ 485                                                                                                                                                        |              |              |              |              |              |              |              |
| Rated Input Frequency [Hz]                | 50,60                                                                                                                                                                                                          |              |              |              |              |              |              |              |
| Max. Input Current [A]@230Vac             | 28.3                                                                                                                                                                                                           | 28.3         | 28.3         | 28.3         | 37.7         | 37.7         | 47.2         | 56.5         |
| Over voltage Category (OVC)               | III                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| AC Output [Back-up]                       |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Max. Output Power [VA]                    | 10000                                                                                                                                                                                                          | 12000        | 15000        | 15000        | 20000        | 20000        | 25000        | 30000        |
| Max. Output Current [A]                   | 14.5                                                                                                                                                                                                           | 17.4         | 21.8         | 21.8         | 29.0         | 29.0         | 36.3         | 43.4         |
| Peak Output Apparent Power [VA]           | 15000,3S                                                                                                                                                                                                       | 18000,3S     | 22500,3s     | 22500,3s     | 30000,3s     | 30000,3s     | 37500,3s     | 45000,3s     |
| Rated AC Voltage/Range [V]                | 3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/312 ~ 485                                                                                                                                                        |              |              |              |              |              |              |              |
| Rated Output Frequency/Range [Hz]         | 50, 60/45~55, 55~65                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Output THDv (@ Linear Load)               | <3%                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Over voltage Category (OVC)               | III                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Efficiency                                |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Max. Efficiency                           | 98.0%                                                                                                                                                                                                          |              |              |              |              |              |              |              |
| Euro Efficiency                           | 97.6%                                                                                                                                                                                                          |              |              |              |              |              |              |              |
| Protection                                |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Battery Input Reverse Polarity Protection | Integrated                                                                                                                                                                                                     |              |              |              |              |              |              |              |
| Over load Protection                      | Integrated                                                                                                                                                                                                     |              |              |              |              |              |              |              |
| AC Short Circuit Current Protection       | Integrated                                                                                                                                                                                                     |              |              |              |              |              |              |              |
| DC Surge Protection                       | Type II                                                                                                                                                                                                        |              |              |              |              |              |              |              |
| AC Surge Protection                       | Type II                                                                                                                                                                                                        |              |              |              |              |              |              |              |
| Anti-islanding Protection                 | AFD                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| AFCI Protection                           | Integrated                                                                                                                                                                                                     |              |              |              |              |              |              |              |
| Interface                                 |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| PV Connection                             | MC4: PV-ADSP4-S2-UR/6 and PV-ADBP4-S2-UR/6                                                                                                                                                                     |              |              |              |              |              |              |              |
| AC Connection                             | Terminal Block                                                                                                                                                                                                 |              |              |              |              |              |              |              |
| Battery Connection                        | Quick connector                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Display                                   | LED+APP                                                                                                                                                                                                        |              |              |              |              |              |              |              |
| Communication                             | Wi-Fi, Ethernet, 4G (optional)                                                                                                                                                                                 |              |              |              |              |              |              |              |
| General Parameters                        |                                                                                                                                                                                                                |              |              |              |              |              |              |              |
| Topology                                  | Non-isolated                                                                                                                                                                                                   |              |              |              |              |              |              |              |
| Operating Temperature Range               | -40°C to +60°C (45°C and above with derating)                                                                                                                                                                  |              |              |              |              |              |              |              |
| Cooling Method                            | Intelligent fan cooling                                                                                                                                                                                        |              |              |              |              |              |              |              |
| Ambient Humidity                          | 0~100% Non-condensing                                                                                                                                                                                          |              |              |              |              |              |              |              |
| Altitude                                  | 4000m (>3000m Power Derating)                                                                                                                                                                                  |              |              |              |              |              |              |              |
| Noise [dBA]                               | <50                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| Ingress Protection                        | IP65                                                                                                                                                                                                           |              |              |              |              |              |              |              |
| Dimensions [H*W*D] [mm]                   | 576*659*242                                                                                                                                                                                                    |              |              |              |              |              |              |              |
| Weight [kg]                               | 50                                                                                                                                                                                                             |              |              |              |              |              |              |              |
| Warranty [Year]                           | Refer to the warranty policy                                                                                                                                                                                   |              |              |              |              |              |              |              |
| Standard                                  | EN 62109-1/2, EN 61000-6-2/4, EN 50438, EN 50549, C10/11, IEC 62116, IEC 61727, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI 0-21, AS 4777.2, NBR 16149, NBR 16150, VDE-AR-N 4105, VDE 0126-1-1 |              |              |              |              |              |              |              |