

## HYBRID SERIES

# TriP2-HB-3P 6-30K (Three-Phase)

- Max. 3 MPPTs and Max. PV input 45kW
- 150% unbalanced output, Max.15kW per phase
- Battery working range: 100~700V
- Max. 30kW UPS output
- Supports independent grid export control for each phase
- Supports up to 10pcs in parallel for on/off grid
- Dedicated GEN port for
  - Auto GEN control
  - Smart load function
  - AC coupling function



High Voltage



| Model                                                                               | TriP2-HB-3P 6K                                    | TriP2-HB-3P 8K | TriP2-HB-3P 10K | TriP2-HB-3P 12K                | TriP2-HB-3P 15K | TriP2-HB-3P 20K | TriP2-HB-3P 25K | TriP2-HB-3P 30K |
|-------------------------------------------------------------------------------------|---------------------------------------------------|----------------|-----------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| Input (PV DC)                                                                       |                                                   |                |                 |                                |                 |                 |                 |                 |
| Max. PV input power (W)                                                             | 9000                                              | 12000          | 15000           | 18000                          | 22500           | 30000           | 37500           | 45000           |
| Rated PV input voltage (V)                                                          |                                                   |                |                 | 690                            |                 |                 |                 |                 |
| Number of independent MPPT inputs                                                   | 2 / (1:1)                                         |                |                 | 3 / (2:2:2)                    |                 |                 |                 |                 |
| Max. PV input voltage (V)                                                           |                                                   |                |                 | 1000                           |                 |                 |                 |                 |
| MPPT voltage range (V)                                                              |                                                   |                |                 | 200 ~ 900                      |                 |                 |                 |                 |
| Start-up voltage (V)                                                                |                                                   |                |                 | 100                            |                 |                 |                 |                 |
| Max. PV input current per MPPT (A)                                                  | 20 / 20                                           |                |                 | 40 / 40 / 40                   |                 |                 |                 |                 |
| Max. PV short-circuit current input per MPPT                                        | 25 / 25 (A:1 / B:1)                               |                |                 | 50 / 50 / 50 (A:2 / B:2 / C:2) |                 |                 |                 |                 |
| Battery                                                                             |                                                   |                |                 |                                |                 |                 |                 |                 |
| Compatible battery type                                                             | Lithium-ion / Lead-Acid                           |                |                 |                                |                 |                 |                 |                 |
| Rated battery voltage (V)                                                           | 400                                               |                |                 |                                |                 |                 |                 |                 |
| Max. charging/discharging current (A)                                               | 50                                                |                |                 | 75                             |                 |                 |                 |                 |
| Max. charging/discharging power (W)                                                 | 6000                                              | 8000           | 10000           | 12000                          | 15000           | 20000           | 25000           | 30000           |
| Force wake up battery from PV function                                              | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Grid                                                                                |                                                   |                |                 |                                |                 |                 |                 |                 |
| Rated AC voltage (V)                                                                | 3L / N / PE, 230 / 400 Vac                        |                |                 |                                |                 |                 |                 |                 |
| Rated AC frequency (Hz)                                                             | 50 / 60                                           |                |                 |                                |                 |                 |                 |                 |
| Rated AC output current (A)                                                         | 8.7                                               | 11.6           | 14.5            | 17.4                           | 21.7            | 29              | 36.2            | 43.5            |
| Rated AC output power (W)                                                           | 6000                                              | 8000           | 10000           | 12000                          | 15000           | 20000           | 25000           | 30000           |
| Max. AC intput current (A)                                                          | 13.1                                              | 17.4           | 21.8            | 26.1                           | 32.6            | 43.5            | 54.3            | 65.3            |
| PF                                                                                  | 0.99 (Adjustable from 0.8 leading to 0.8 lagging) |                |                 |                                |                 |                 |                 |                 |
| THDI                                                                                | < 3%                                              |                |                 |                                |                 |                 |                 |                 |
| Max. continuous AC passthrough current (A)                                          | 75                                                |                |                 |                                |                 |                 |                 |                 |
| GEN                                                                                 |                                                   |                |                 |                                |                 |                 |                 |                 |
| Rated GEN voltage (V)                                                               | 3L / N / PE, 230 / 400Vac                         |                |                 |                                |                 |                 |                 |                 |
| Rated GEN frequency (Hz)                                                            | 50 / 60                                           |                |                 |                                |                 |                 |                 |                 |
| Rated GEN input current (A)                                                         | 30                                                |                |                 |                                |                 |                 |                 |                 |
| Rated GEN input power (W)                                                           | 20700                                             |                |                 |                                |                 |                 |                 |                 |
| UPS                                                                                 |                                                   |                |                 |                                |                 |                 |                 |                 |
| Rated output power (W)                                                              | 6000                                              | 8000           | 10000           | 12000                          | 15000           | 20000           | 25000           | 30000           |
| Rated output voltage (V)                                                            | 3L / N / PE, 230 / 400 Vac                        |                |                 |                                |                 |                 |                 |                 |
| Rated output current (A)                                                            | 8.7                                               | 11.6           | 14.5            | 17.4                           | 21.7            | 29              | 36.2            | 43.5            |
| Rated output frequency (Hz)                                                         | 50 / 60                                           |                |                 |                                |                 |                 |                 |                 |
| Surge power, duration                                                               | 1.5 × rated power for 5min                        |                |                 |                                |                 |                 |                 |                 |
| Switching time                                                                      | ≤ 10ms                                            |                |                 |                                |                 |                 |                 |                 |
| Wave form                                                                           | Sine wave                                         |                |                 |                                |                 |                 |                 |                 |
| THDV                                                                                | < 3%                                              |                |                 |                                |                 |                 |                 |                 |
| Efficiency                                                                          |                                                   |                |                 |                                |                 |                 |                 |                 |
| Max. efficiency                                                                     | 97.4%                                             |                |                 |                                |                 |                 |                 |                 |
| Max. charge/discharge efficiency                                                    | 97.2%                                             |                |                 |                                |                 |                 |                 |                 |
| Protection                                                                          |                                                   |                |                 |                                |                 |                 |                 |                 |
| PV reverse polarity protection                                                      | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Over current/voltage protection                                                     | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Anti-islanding protection                                                           | YES                                               |                |                 |                                |                 |                 |                 |                 |
| AC Short-circuit protection                                                         | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Leakage current protecion                                                           | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Grid monitoring                                                                     | YES                                               |                |                 |                                |                 |                 |                 |                 |
| DC switch                                                                           | YES                                               |                |                 |                                |                 |                 |                 |                 |
| Ingress protection                                                                  | YES                                               |                |                 |                                |                 |                 |                 |                 |
| DC Surge protection                                                                 | Type III                                          |                |                 |                                |                 |                 |                 |                 |
| AC Surge protection                                                                 | Type III                                          |                |                 |                                |                 |                 |                 |                 |
| General                                                                             |                                                   |                |                 |                                |                 |                 |                 |                 |
| Dimensions (W × H × D)                                                              | 480 × 703 × 258mm / 18.9 × 27.7 × 10.2 in         |                |                 |                                |                 |                 |                 |                 |
| Weight                                                                              | TBD                                               |                |                 | 50 kg / 110.2 lbs              |                 |                 |                 |                 |
| Ingress protection rating                                                           | IP66                                              |                |                 |                                |                 |                 |                 |                 |
| Operating environment temperature range (°C)                                        | -25 ~ 60                                          |                |                 |                                |                 |                 |                 |                 |
| Storage temperature range (°C)                                                      | -40 ~ 70                                          |                |                 |                                |                 |                 |                 |                 |
| Relative humidity                                                                   | 0 ~ 100%                                          |                |                 |                                |                 |                 |                 |                 |
| Display & Communication interface                                                   | Touch color screen, RS485 / Wifi / CAN            |                |                 |                                |                 |                 |                 |                 |
| Warranty                                                                            | 5 / 10 years                                      |                |                 |                                |                 |                 |                 |                 |
| Cooling method                                                                      | Natural cooling                                   |                |                 | Smart cooling                  |                 |                 |                 |                 |
| Topology                                                                            | Transformerless                                   |                |                 |                                |                 |                 |                 |                 |
| Max. Operating Altitude (m)                                                         | 2000                                              |                |                 |                                |                 |                 |                 |                 |
| Noise emission (dB)                                                                 | 50                                                |                |                 |                                |                 |                 |                 |                 |
| Standards & Certification                                                           |                                                   |                |                 |                                |                 |                 |                 |                 |
| EN 62109-1/-2, EN 50549-1, CEI 0-21: 2022 ( V2 : 2024-01), PTPIREE TypeA, G99, G100 |                                                   |                |                 |                                |                 |                 |                 |                 |