HYBRID SERIES

TriP2-LB-3P 5-20K (Three-Phase)

- Supportsthree-phase unbalancedloadsforgreatercompatibility with mixed residential or commercial applications
- Max. 3 MPPTs with 3 strings, Max. PV input: 30kW
- Compatible with 48V low-voltage battery systems
- Supports independent grid export control for each phase
- Time of use, 8 time periods for charging & discharging
- Max. 10 pcs parallel for on grid &off grid
- Dedicated GEN port for

  - Auto GEN control
  - Smart load function
  - AC coupling function



Low Voltage



Model	TriP2-LB-3P 5K	TriP2-LB-3P 6K	TriP2-LB-3P 8K	TriP2-LB-3P 10K	TriP2-LB-3P 12K	TriP2-LB-3P 15K	TriP2-LB-3P 20K
Input (PV DC)							
Max. PV input power (W)	7500	9000	12000	15000	18000	22500	30000
Rated PV input voltage (V)	690						
Number of independent MPPT inputs	3 / (1:1:1)						
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 / 20						
Max. PV short-circuit current input per MPPT	25 / 25 / 25						
Battery							
Compatible battery type	Lithium-ion / Lead-Acid						
Battery voltage range (V)	40 - 60						
Max. charging/discharging current (A)	125	150	200	220	250	250	250
Max. charging/discharging power (W)	5000	6000	8000	10000	12000	12000	12000
Charging Strategy for Li-ion Battery	Self-adaption to BMS						
Grid							
Rated AC voltage (V)	3L / N / PE, 230 / 400 Vac						
Rated AC frequency (Hz)	50 / 60						
Rated AC output power (W)	5000	6000	8000	10000	12000	15000	20000
Rated AC output current (A)	7.20	8.70	11.60	14.50	17.40	21.70	29.00
Max. AC input current (A)	9	10.9	14.5	18.1	21.8	27.1	36.25
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)						
THDI	< 3%						
Max. continuous AC passthrough current (A)		30		50			70
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)	5000	6000	8000	10000	12000	15000(PV+Battery)	20000(PV+Battery)
Rated output voltage (V)	3L / N / PE, 230 / 400 Vac						
Rated output current (A)	7.20	8.70	11.60	14.50	17.40	21.70	29.00
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	97.7%						
Max. charge/discharge efficiency	94.0%						
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	53 kg / 116.8 lbs						
Ingress protection rating	IP66						
Operating environment temperature range (°C)	-25~+60, > 45℃ derating						
Storage temperature range (°C)	-25 ~ +60						
Relative humidity	0 ~ 100						
Display & Communication interface	Touch color screen, RS485 / Wifi / CAN						
Warranty	5 / 10 years						
Cooling method	Smart cooling						
Topology	Transformer-less						
Max. Operating Altitude (m)	2000						
Noise emission (dB)	50						
Standards & Certification							

EN 62109/EN 61000, IEC 61683, EN 50549-10, PTPIREE TypeA

Tesla Solar SA