

HYBRID SERIES

TriP2-HB-US 6-15K (Three-Phase)

- 120/208V Three-Phase Output
Designed for American grid standards and multi-load environments
- Up to 3 MPPTs · 22.5kW Max. PV Input
Flexible PV design for complex rooftops and multiple orientations
- 150% Phase Imbalance Capability
Up to 7.5kW on a single phase, stable even with uneven loads
- Wide HV Battery Range: 100–600V
Designed for flexible high-voltage battery integration
- Up to 15kW UPS Backup Output
Millisecond-level switching for uninterrupted critical loads
- Parallel Up to 10 Units
Scalable for both on-grid and off-grid systems
- Dedicated Smart GEN Port
One port, three functions:
 - Automatic Generator Control
 - Smart Load Management
 - AC Coupling Support



High Voltage



Model	TriP2-HB-US 6K	TriP2-HB-US 8K	TriP2-HB-US 10K	TriP2-HB-US 12K	TriP2-HB-US 15K
Input (PV DC)					
Max. PV input power (W)	9000	12000	15000	18000	22500
Rated PV input voltage (V)	550				
Number of independent MPPT inputs	3 / (2:2:2)				
Max. PV input voltage (V)	650				
MPPT voltage range (V)	200 ~ 600				
Start-up voltage (V)	100				
Max. PV input current per MPPT (A)	40 / 40 / 40				
Max. PV short-circuit current input per MPPT (A)	50 / 50 / 50				
Battery					
Compatible battery type	Lithium-ion / Lead-Acid				
Rated battery voltage (V)	400				
Battery voltage range (V)	100 ~ 600				
Max. charging voltage (V)	600				
Max. charging / discharging current (A)	75				
Max. charging / discharging power (W)	6000	8000	10000	12000	15000
Force wake up battery from PV function	YES				
Grid					
Rated AC voltage (V)	3L / N / PE, 120 / 208Vac				
Rated AC frequency (Hz)	50 / 60				
Rated AC output current (A)	16.7	22.2	27.8	33.3	41.7
Rated AC output power (W)	6000	8000	10000	12000	15000
Max. AC input current (A)	25.0	33.3	41.7	50.0	62.5
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, 120 / 208Vac				
Rated GEN frequency (Hz)	50 / 60				
Rated GEN input current (A)	30				
Rated GEN input power (W)	10800				
UPS					
Rated output power (W)	6000	8000	10000	12000	15000
Rated output voltage (V)	3L / N / PE, 120 / 208Vac				
Rated output current (A)	16.7	22.2	27.8	33.3	41.7
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	97.2%	97.3%	97.4%		97.5%
Max. charge / discharge efficiency	97.1%	97.2%			97.3%
Protection					
PV reverse polarity protection	YES				
Battery reverse polarity protection	YES				
PV Insulation Detection	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 × 257 mm / 18.9 × 27.7 × 10.1 in				
Weight	50 kg / 110.2 lbs				
Ingress protection rating	IP65				
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	Smart cooling				
Topology	Transformerless				
Max. Operating Altitude (m)	2000				
Noise emission (dB)	50				
Standards & Certification					