



- Self-consumption and feed-in option
- Programmable power source priority
- Battery charging modes for different battery types
- Multiple operations mode
- Timer for off/on grid operations
- Parallel function up to 6 units



MODEL	TT-PLUS10K/MPPT	TT-PLUS15K/MPPT
Phase	3-phase in / 3-phase out	
Maximum PV Input Power [W]	14850	22500
Rated Output Power [W]	10000	15000
Maximum Charging Power [W]	9600	15000
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage [V] / Maximum DC Voltage [V]	720 / 900	
Start-up Voltage [V] / Initial Feed-In Voltage [V]	320 / 350	
MPPT Voltage Range [V]	400 ~ 800	
Number of MPPT Trackers / Maximum Input Current [A]	2 / 2 x 18.6	2 / A: 37.65; B: 18.6
GRID OUTPUT (AC)		
Nominal Output Voltage [V AC]	230 (P-N) / 400 (P-P)	
Output Voltage Range [A]	184 - 265* per phase	184 - 264.5 per phase
Nominal Output Current [A]	14.5 per phase	21.7 per phase
Power Factor	> 0.99	
EFFICIENCY		
Maximum Converts On Efficiency (DC/AC) [%]	96	
European Efficiency @ Vnominal [%]	95	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage [V AC] / Auto Restart Voltage [V AC]	120 - 140 per phase / 180 per phase	
Acceptable Input Voltage Range [V]	170 - 280 per phase	
Maximum AC Input Current [A]	40	
PV INPUT (DC)		
Maximum DC Voltage [V]	900 VDC	
MPPT Voltage Range [V]	400 ~ 800	350 ~ 850
Number of MPPT Trackers / Maximum Input Current [A]	2 / 2 x 18.6	2 / A: 37.65; B: 18.6
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage [V AC]	230 (P-N) / 400 (P-P)	
Output Waveform	Pure Sine Wave	
Battery Efficiency (DC to AC) [%]	91	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage [V] / Maximum DC Voltage [V]	720 / 900	
Start-up Voltage [V] / Initial Feed-In Voltage [V]	320 / 350	
MPPT Voltage Range [V]	400 ~ 800	350 ~ 850
Number of MPPT Trackers / Maximum Input Current [A]	2 / 2 x 18.6	2 / A: 37.65; B: 18.6
GRID OUTPUT (AC)		
Nominal Output Voltage [V AC]	230 (P-N) / 400 (P-P)	
Output Voltage Range [V AC]	184 - 265* per phase	184 - 264.5 per phase
Nominal Output Current [A]	14.5 per phase	21.7 per phase
AC INPUT		
AC Start-up Voltage [V AC] / Auto Restart Voltage [V AC]	120 - 140 per phase / 180 per phase	
Acceptable Input Voltage Range [V AC]	170 - 280 per phase	
Maximum AC Input Current [A]	40	
BATTERY & CHARGER		
Nominal DC Voltage [V]	48	
Maximum Charging Current [A]	Default 60, 10 - 200 (Adjustable)	Default 60, 5 - 300 (Adjustable)
GENERAL		
PHYSICAL		
Dimension, D x W x H [mm]	167,2 x 500 x 622	219 x 650 x 820
Net Weight [Kg]	40	62
INTERFACE		
Communication Port	RS-232/USB	RS-232, USB and Dry contact
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available	
ENVIRONMENT		
Relative Humidity [%]	0 ~ 90 RH (Non-Condensing)	
Operating Temperature [°C]	-10 to 55	
Altitude [m]	0 ~ 1000 **	

*These figures may vary depending on different AC voltage and country requirements.

**Power derating 1% every 100 m when altitude is over 1000m.

***TommaTech GmbH reserves the right to change the specifications of the products without prior notice.