

TommaTech: On-Grid Inverter with Energy Storage



- Self-consumption and feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current suits different types of batteries
- Programmable multiple operations modes: Grid tie, Off grid, and grid-tie with backup
- Built-in Timer for various mode of on/off operation
- Multiple communication for USB, RS-232, Modbus and SNMP
- Monitoring software for real time status display and control
- Custom-made firmware by ODM contract
- Parallel operation up to 6 units

MODEL	TT-PLUS10K/MPPT	TT-PLUS15K/MPPT
PHASE	3-phase in / 3-phase out	
MAXIMUM PV INPUT POWER	14850 W	22500 W
RATED OUTPUT POWER	10000 W	15000 W
MAXIMUM CHARGING POWER	9600 W	15000 W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
MPP Voltage Range	400 VDC ~ 800 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.65A; B: 18.6A
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265VAC* per phase	184 - 264.5VAC per phase
Nominal Output Current	14.5A per phase	21.7A per phase
Power Factor	> 0.99	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	96%	
European Efficiency@ Vnominal	95%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40A	
PV INPUT (DC)		
Maximum DC Voltage	900 VDC	900 VDC
MPP Voltage Range	400 VDC ~ 800 VDC	350 VDC ~ 850 VDC
Number of MPP Trackers/Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.65A; B: 18.6A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	91%	91%
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
MPP Voltage Range	400 VDC ~ 800 VDC	350 VDC ~ 850 VDC
Number of MPP Trackers/Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.65A; B: 18.6A
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC* per phase	184 - 264.5 VAC per phase
Nominal Output Current	14.5 A per phase	21.7A per phase
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase	170 - 280 VAC per phase
Maximum AC Input Current	40 A	40 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%	91%
BATTERY & CHARGER		
Nominal DC Voltage	48 VDC	
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)	Default 60A, 5A - 300A (Adjustable)
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	167.2 x 500 x 622	219 x 650 x 820
Net Weight (kgs)	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		
Humidity	0 ~ 90% RH (Non-Condensing)	
Operating Temperature	-10 to 55°C	
Altitude	0 ~ 1000 m**	

*These figures may vary depending on different AC voltage and country requirements.
 **Power derating 1% every 100 m when altitude is over 1000m.
 Product specifications are subject to change without further notice.