





## THREE PHASE HYBRID INVERTER MAXI SERIES INV-TT-TF-M50K



- 100** 100% unbalanced output, each phase
-  AC couple to retrofit existing solar system
- 10** \*Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100** Max. charging/discharging current of 100A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Model	INV-TT-TF-M50K
<b>Battery Input Data</b>	
Battery Type	Lithium
Battery Voltage Range (V)	160-800
Max. Charging Current (A)	50+50
Max. Discharging Current (A)	50+50
Number of Battery Input	2
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power (W)	65000
Max. DC Input Voltage (V)	1000
Start-up Voltage (V)	180
MPPT Range (V)	150-850
Full Load DC Voltage Range (V)	450-850
Rated DC Input Voltage (V)	600
PV Input Current (A)	36+36+36+36
Max. PV $I_{sc}$ (A)	55+55+55+55
No. of MPP Trackers	4
No. of Strings per MPP Tracker	2+2+2+2
<b>AC Output Data</b>	
Rated AC Output Active Power (W)	50000
Max. AC Output Active Power (W)	55000
AC Output Rated Current (A)	75.8/72.5
Max. AC Output Current (A)	83.4/79.7
Max. Three-phase Unbalanced Output Current (A)	83.3
Max. Continuous AC Passthrough (A)	200
Peak Power (Off Grid)	1.5 time of rated power, 10 S
Generator Input/Smart Load /AC Couple Current (A)	75.8 / 200 / 75.8
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac
Grid Type	Three Phase
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% In
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
<b>Protection</b>	
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection, Arc Fault Circuit Interruption (AFCI optional)
Over Voltage Category	DC Type II/AC Type III
<b>Certifications and Standards</b>	
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
<b>General Data</b>	
Operating Temperature Range (°C)	-40-60 , >45 Derating
Cooling	Smart Cooling
Noise (dB)	≤65 dB
Communication with BMS	CAN
Weight (kg)	80
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years (10 Years Optional)