



Three Phase LV Hybrid Inverter
Trio Hybrid F-Series

Simple. Reliable. Efficient.



3- Phase
Unbalanced
Output



Phase
Imbalance
Adjustment



Expandable
System



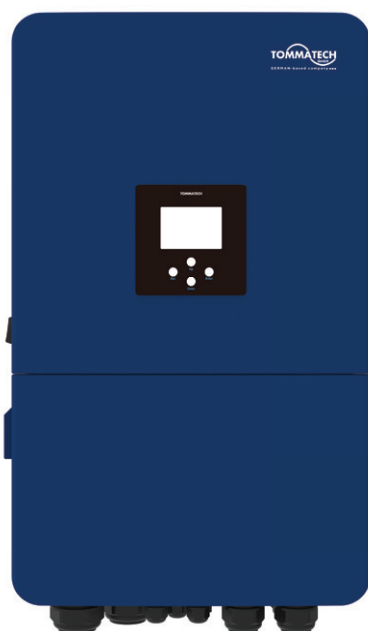
240A
-
350A
Maximum
Charge/Discharge
Current



48V Battery
Output Voltage



Generator
Supported



15.0KW

20.0KW

TRIO HYBRID LV 15.0F / TRIO HYBRID LV 20.0F

TommaTech Trio Hybrid LV F-Series Three Phase LV Hybrid Inverter, in addition to its phase imbalance output support feature, is an ideal solution for low voltage battery applications with a 48V battery system voltage. The inverter series, which works perfectly with TommaTech LV Lithium Batteries and has remote control capability, can be easily preferred for both residential and commercial projects. The hybrid three-phase inverter can reach high capacities with up to 6 and 10 units in parallel, and at the same time, this power can be sustainably supported by lithium batteries.

TOMMATECH TRIO HYBRID F SERIES THREE PHASE LV HYBRID INVERTER

Model	TRIO HYBRID LV 15.0F	TRIO HYBRID LV 20.0F
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	280	350
Max. Discharging Current (A)	280	350
Charging Strategy for Li-ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
PV String Input Data		
Max. PV Input Power (W)	22500	30000
Max. PV Input Voltage (V)	800	
Start-up Voltage (V)	160	
MPPT Voltage Range (V)	160-650	
Rated PV Input Voltage (V)	550	
Max. Operating PV Input Current (A)	36+20	
Max. Input Short-Circuit Current (A)	54+30	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+1	
AC Input/Output Data		
Rated AC Input/Output Active Power(W)	15000	20000
Max. AC Input/Output Apparent Power(VA)	16500	22000
Rated AC Input/Output Current (A)	22.8/21.8	30.4/29
Max. AC Input/Output Current(A)	22.8/21.8	30.4/29
Max. Continuous AC Passthrough (grid to load) (A)	70	
Peak Power (off-grid) (W)	2 times of rated power, 10s	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65	
Grid Connection Form	3L+N+PE	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Injection Current	<0.5% In	
Efficiency		
Max. Efficiency	97.6%	
Euro Efficiency	97.0%	
MPPT Efficiency	>99%	
Equipment Protection		
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	RS485/RS232/CAN	
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)	
General Data		
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	3000m	
Noise (dB)	<60	
Ingress Protection(IP) Rating	IP 65	
Inverter Topology	Non-Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm)	456×750×268.5 (Excluding Connectors and Brackets)	
Weight (kg)	50.6	
Type of Cooling	Intelligent Air Cooling	
Warranty	5 Years/10 Years	