



Three Phase String Inverter
Trio Force Series
70 / 75 / 80 / 90 / 100 / 110

Strength. Stability. Performance.



High Efficiency



Zero Export



Wide Voltage Range



High PV Voltage



Remote Monitoring



Surge Protection

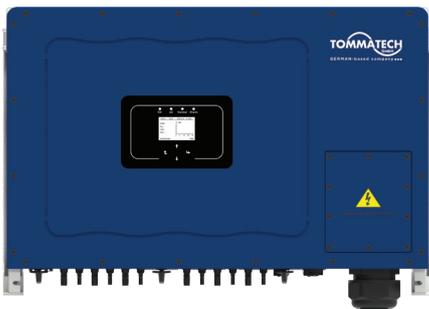


IP65

70.0kW

75.0kW

**Trio Force 70K / Trio Force 75K / Trio Force 80K /
Trio Force 90K / Trio Force 100K / Trio Force 110K**



Trio Force Series delivers high-capacity three-phase string inverter solutions designed for large-scale commercial and industrial solar energy projects. Its advanced multi-MPPT architecture enables maximum energy yield in high-power and complex PV installations, while high efficiency and a wide output voltage range ensure strong and stable grid interaction. With a robust mechanical design, efficient thermal management, and comprehensive protection features, the Trio Force Series is a reliable solution for projects requiring high performance and long-term operation.



	Trio Force 70K	Trio Force 75K	Trio Force 80K	Trio Force 90K	Trio Force 100K	Trio Force 110K
PV STRING INPUT DATA						
Max. PV Input Power (kW)	91	97.5	104	135	150	150
Max. PV Input Voltage (V)	1000					
Start-up Voltage (V)	250					
MPPT Voltage Range (V)	200-850					
Rated PV Input Voltage (V)	600					
Max. Operating PV Input Current (A)	40+40+40+40			40+40+40+40+40+40		
Max. Input Short-Circuit Current (A)	60+60+60+60			60+60+60+60+60+60		
No. of MPPT Trackers/ No. of Strings MPP Tracker	4/4+4+4+4			6/4+4+4+4+4+4		
AC INPUT/OUTPUT DATA						
Rated AC Output Active Power (kW)	70	75	80	90	100	110
Max. AC Output Apparent Power (kVA)	77	82.5	88	99	110	121
Rated AC Output Current (A)	106.1/101.5	113.6/108.7	121.2/115.9	136.4/130.4	151.5/144.9	166.7/159.4
Max. AC Output Current (A)	116.7/111.6	125/119.6	133.3/127.5	150/143.5	166.7/159.4	183.3/175.4
Rated Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un					
Grid Connection Form	3L/N/PE					
Rated Output Grid Frequency/Range (Hz)	50/45-55, 60/55-65					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Total Current Harmonic Distortion THDi	<3%					
DC Injection Current	<0.5% In					
EFFICIENCY						
Max. Efficiency	98.7%			98.8%		
Euro Efficiency	98.1%			98.2%		
MPPT Efficiency	>99%					
EQUIPMENT PROTECTION						
DC Reverse Polarity Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
Insulation Impedance Detection	Yes					
DC Component Monitoring	Yes					
Arc Fault Circuit Interrupter (AFCI)	Optional					
Anti-islanding Protection	Yes					
Residual Current Detection	Yes					
Surge Protection Level	TYPE II(DC), TYPE II(AC)					
DC Switch	Yes					
INTERFACE						
Communication Interface	RS485/RS232					
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)					
GENERAL DATA						
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude (m)	4000m					
Noise (dB)	≤55					
Ingress Protection (IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm) (Excluding Connectors and Brackets)	824x516x312.7					
Weight (kg)	81					
Warranty	5 Years					
Type of Cooling	Intelligent Air Cooling					
Grid Regulation	IEC 61727, IEC 62116, EN 50549					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					