



Three Phase String Inverter  
**Trio Grand Series**  
120 / 125 / 130 / 135 / 136



*High Power. High Confidence.*



High Efficiency



Zero Export



Wide Voltage Range



High PV Voltage



Surge Protection

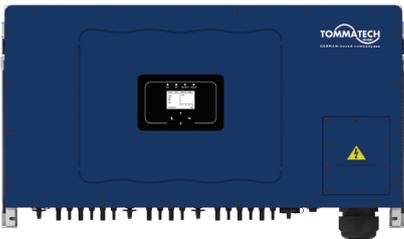


IP65

120.0kW

125.0kW

## Trio Grand 120K / Trio Grand 125K / Trio Grand 130K / Trio Grand 135K / Trio Grand 136K



Trio Grand Series offers top-tier three-phase string inverter solutions developed for large-scale commercial and industrial solar energy projects. Its advanced architecture with a high number of MPPTs supports maximum energy yield across wide and complex PV plants, 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 Grand Series delivers a reliable solution for projects requiring high capacity and long-term operation.



	Trio Grand 120K	Trio Grand 125K	Trio Grand 130K	Trio Grand 135K	Trio Grand 136K
<b>PV STRING INPUT DATA</b>					
Max. PV Input Power (kW)	180	187.5	195	202.5	204
Max. PV Input Voltage (V)			1100		
Start-up Voltage (V)			250		
MPPT Voltage Range (V)			200-1000		
Rated PV Input Voltage (V)			600		
Max. Operating PV Input Current (A)			40+40+40+40+40+40+40+40		
Max. Input Short Circuit Current (A)			60+60+60+60+60+60+60+60		
No. of MPP Trackers/ No. of Strings MPP Tracker			8/4+4+4+4+4+4+4+4		
<b>AC OUTPUT SIDE</b>					
Rated AC Output Active Power (kW)	120	125	130	135	136
Max. AC Output Apparent Power (kVA)	132	135	135	135	136
Rated AC Output Current (A)	181.9/174	189.4/181.2	197/188.5	204.6/195.7	206.1/197.2
Max. AC Output Current (A)	200/191.4	204.6/195.7	204.6/195.7	204.6/195.7	206.1/197.2
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		
<b>EFFICIENCY</b>					
Max. Efficiency			98.8%		
Euro Efficiency			98.2%		
MPPT Efficiency			>99%		
<b>EQUIPMENT PROTECTION</b>					
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		
<b>INTERFACE</b>					
Communication Interface			RS485/RS232		
Monitor Mode			GPRS/WIFI/Bluetooth/4G/LAN(optional)		
<b>GENERAL DATA</b>					
Operating Temperature Range (°C)			-25 to +60°C, >45°C Derating		
Permissible Ambient Humidity			0-100%		
Permissible Altitude (m)			4000m		
Noise (dB)			≤65		
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)			1006x516x325.5		
Weight (kg)			103		
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		