



Three Phase Hybrid Inverter
Trio Hybrid S Series
5 / 6 / 8 / 10 / 12



All-In-One. Reliable. Modular



High Efficiency



AC Coupling



Smart Management



Modular Design



IP65

5K

6K



Trio Hybrid S 5K LV AIO / Trio Hybrid S 6K LV AIO
Trio Hybrid S 8K LV AIO / Trio Hybrid S 10K LV AIO
Trio Hybrid S 12K LV AIO

TommaTech Trio Hybrid S Series is an advanced low voltage, three phase hybrid energy storage system that integrates a high efficiency inverter and scalable LiFePO₄ battery modules into a single, easy to install solution. With flexible modular capacity, smart energy management (peak shaving, AC coupling, etc.), robust IP65 protection, and broad compliance with international grid standards, the system delivers reliable, high performance power conversion and backup energy for residential and light commercial applications.

TRIO HYBRID S SERIES (THREE PHASE)



Trio Hybrid S 5K LV AIO Trio Hybrid S 6K LV AIO Trio Hybrid S 8K LV AIO Trio Hybrid S 10K LV AIO Trio Hybrid S 12K LV AIO

SYSTEM SPECIFICATION

Nominal Output Power/UPS Power (W)	5000 / 5000	6000 / 6000	8000 / 8000	10000 / 10000	12000 / 12000
AC Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Recommended Energy Configuration	5kWh(Min.)		10kWh(Min.)		15kWh(Min.)
Max. Charging/Discharging Current (A)	120	150	190	210	240
Battery Operating Voltage (V)	43.2 ~ 57.6				
Battery Chemistry	LiFePO4				
IP Rating of Enclosure	IP65 (after stacking)				
System Certification	IEC62619, CE				
Warranty (1)	Battery 10 years (Inverter 5 years)				

INVERTER TECHNICAL SPECIFICATION

Max. PV Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (Vdc)	550 (160~800)				
Start Up DC Voltage (Vdc)	160				
MPPT Voltage Range (Vdc)	200~650				
Full Load DC Voltage Range (V)	350~650				
Max. PV Input Current (A)	13+13			26+13	
Max. PV Short-circuit Current (A)	17+17			34+17	
No. of MPP Trackers	2				
Peak Power (off grid)	2 time of rated power, 10s				
Power Factor	0.8 leading to 0.8 lagging				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Display	LCD				
Relative Humidity	15% ~ 85% (No Condensing)				
Dimension (W x D x H,mm)	720x255x440				
Weight (kg)	38				
Communication with BMS	CAN2.0				
EMC/Safety Regulation	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4				
Grid Regulation	VDE4105, IEC61727/62116, EN50549-1				
Max. Efficiency	97.60%				
Max. charging/discharging efficiency	95.50%				

BATTERY TECHNICAL SPECIFICATION

Nominal Voltage (V)	51.2				
Battery Module Energy (kWh)	5.12				
Module Scalability	Max.36 pcs in parallel (Max. capacity of 184kWh)				
Battery Module Dimension	720 x 255 x 300 (W x D x H, mm)				
Battery Base Dimension	720 x 255 x 68 (W x D x H, mm)				
Battery PDU3 Dimension	720 x 255 x 228 (W x D x H, mm)				
Battery Module Weight (kg)	53				
Operating Temperature Range	Charge: 0 ~55°C / Discharge: -20°C ~ +55°C				
Cycle Life	≥6000 (25°C±2°C, 0.5C/0.5C, 90%DOD, 70%EOL)				
Battery Module Certification	IEC62619, CE, CE-LVD				