



TG-HPS Series

All-in-One Photovoltaic Storage Machine

Photovoltaic storage devices specially designed for small and medium-sized microgrid systems



0ms switching
No load dropout



Intelligent software and hardware protection mechanisms



Flexible setting of working modes



Supports multiple communication methods



High-precision and high-quality power supply



Support multiple energy management strategies



Flexible configuration of PV controllers



7-inch large touchscreen display



MODEL	TGH3330	TGH3340	TGH3360	TGH3380	TGH33100	TGH33120
Rated Capacity (kVA)	30	40	60	80	100	120
Rated Power (kW)	27	36	54	72	90	108
Rated Voltage	400V					
AC Mode	3W+N+PE					
Voltage Range	320V-460V					
Rated Output Voltage	400V±1%					
Rated Frequency	50/60Hz					
Frequency Range	45-55/55-65Hz					
Isolation Transformer	Standard Accessories					
Battery pack voltage adaptation	330-430Vdc					
Battery cell count adaptation	120 sections					
Working Mode	ECO, Load Priority, Battery Priority, Peak Shaving					
PV Input						
PV Max. Input Voltage	900Vdc					
MPPT Voltage Range	450 - 900Vdc					
Max. Input Power (Per Circuit)	60kW					
Full Power Voltage Range	450-900Vdc					
Starting Voltage	450V					
Max. PV Current	135A Per Circuit					
Number Of PV Input Circuits	1		1+1		2+1	
AC Rectifier						
Input Voltage Range	Three-phase 400V±20%					
Rated Frequency	50Hz / 60Hz (Backend settings)					
Frequency Range	50Hz/60Hz ± 5Hz					
Soft Start	0-100% 10s					
Float Voltage (25°C)	405V±1% (Settable)					
Equalizing Voltage (25°)	425V±1% (Settable)					
Max. Charging Current (A)	160		240		320	
Inverter						
Inverter Output Voltage	3-phase 4-wire +G 400Vac					
Output Phase Voltage Setting	220-230-240Vac(Settable)					
Output Voltage Accuracy	±1%					
Voltage Transient Range	±5%					
Transient Recovery Time	20ms					
Rated Frequency	50 Hz / 60Hz±1%(Settable)					
Frequency Tracking Range	50H/60Hz±3 Hz					
Peak Factor	3:01					
Waveform	Sine Wave					
Waveform Distortion Rate	≤3%(Linear Load)					
Voltage Imbalance Rate	±3%(100% Unbalanced Load)					
Overload	when 105%< load rate ≤110%: turn to bypass after 1 hour, load shedding automatic recovery					
	when 110% < Load rate ≤125%: turn to bypass after 10 minutes, load shedding automatic recovery					
	when 125% < Load rate ≤150%时: turn to bypass after 1 minute, load shedding automatic recovery					
	when 150% < Load rate ≤200%: the system will be shut down directly after 10s, and the user will confirm the load reduction and power on.					
	when 200% < Load rate: The system shuts down immediately and the user confirms the load-shedding power-up					
Short-Circuit	System current limiting, immediate shutdown, user confirmation of power on					
Bypass						
Rated Voltage	3-phase 4-wire +G 400Vac					
Voltage Range	±20%					
Rated Frequency	50/60Hz±5Hz					
Battery						
Battery Capacity	Settable					
Termination discharge voltage (25°)	Settable					
Charge Current Setting	Lithium: factory setting 0.50C ₁₀ , 0.05-2.0C ₁₀ (Settable)					
Battery Intelligent Management	Automatic switching between equalizing and float charging					
	Battery pack automatic temperature compensation (according to the ambient temperature when the battery temperature detection line is not connected), default 2mV/°C					
Staggered Discharge Depth Setting	User settable					
Conversion Time						
Inverter-Bypass Switching	0ms					
Bypass-Inverter Switching	0ms					
Communication Interface						
Remote Control Input	Battery self-test, inverter power on, power off, abnormality clearing, emergency shutdown					
Computer Monitoring Port	RS232、RS485、CAN、SNMP (Optional) 、WIFI (Optional) 、GPRS (Optional)					
Dry Contact Output 12Vdc/250Vac 1A Max	Bypass input abnormality, rectifier input abnormality, system fault, system alarm, battery low voltage, output overload, fan fault, generator ON/OFF (settable)					
Environment						
Operating Temperature	0 - 40°C					
Max. Relative Humidity	90% (Non-condensing)					
Max. Elevation	1000 meters rated power (1% reduction for 100 meters of elevation) 4000 meters Max.					
Others						
Cooling	Forced Ventilation					
Noise	< 65					
Mean Time Between Failure(MTBF)	200,000 hours					
IP Class (EN60529)	IP20					
Incoming Wires	Downward entry line					
Standard	IEC62040-1-1、EN62109-1:2010, EN62109-2:2011					