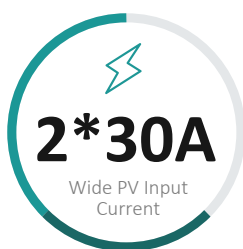




SMART ENERGY
SUSTAINABLE SOLUTIONS „

Three Phase Hybrid Inverter

HESS-HY-T-15K/20K-M4



Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- 40A charging/discharging for efficient energy transfer
- Continuous 110% AC overloading sustains power
- 10ms UPS-level switch secures supply

Simplified Interaction

- Remote upgrades maintain system health
- Indicators for quick status checks
- OLED and App for easy control

Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 200% max backup @60s handles overloads
- IP65 protects both indoors and outdoors

Intelligent Energy Dynamics

- Five work modes for diverse use
- Six charge/discharge intervals optimize control
- Centralized smart management for efficiency

Three Phase Hybrid Inverter

Type Designation	HESS-HY-T-15K-M4	HESS-HY-T-20K-M4
PV Input		
Max. Input Power	22.5kW	30.0kW
Start-up Voltage	135V	
Max. DC Input Voltage *	1000V	
Rated DC Input Voltage	620V	
MPPT Voltage Range *	200-950V	
No. of MPP Trackers	2	
No. of DC Inputs per MPPT	2	
Max. Input Current	30×2A	
Max. Short-circuit Current	40×2A	
Battery Side		
Batrery Type	Lithium Battery (with BMS)	
Battery Voltage Range	135-750V	
Max. Charge/Discharge Current	40/40A	
Grid Side		
Rated Output Power	15.0 kW	20.0 kW
Max. Output Apparent Power	16.5 ³⁾ kVA	22.0kVA
Max. Input Apparent Power **	30.0kVA	30.0kVA
Max. Charging Power of Battery	15.0 kW	20.0 kW
Rated AC Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V	
Rated AC Frequency	50 Hz / 60 Hz	
Max. Output Current	25.0 ⁴⁾ A	33.5 A
Power Factor	0.8 leading ... 0.8 lagging	
Max. Total Harmonic Distor on	<3% @Rated output power	
DCI	<0.5%In	
Back-up Side		
Rated Output Power	15.0kW	20.0kW
Max. Output Apparent Power	16.5kVA	22.0 kVA
Max. Output Current	25.0 A	33.5A
UPS Switching Time	<10ms	
Rated Output Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V	
Rated Output Frequency	50 Hz / 60 Hz	
Peak Output Apparent Power	22.5kVA, 60s	30kVA, 60s
Voltage Harmonic Distortion	<3% @Linear load	
Efficiency		
Max. Efficiency	98.4%	
European Efficiency	97.5 %	

Three Phase Hybrid Inverter

Type Designation	HESS-HY-T-15K-M4	HESS-HY-T-20K-M4
Protection		
DC Reverse Polarity Protection	Integrated	
Battery Input Reverse Connection Protection	Integrated	
Insulation Resistance Protection	Integrated	
Surge Protection	Integrated	
Over-temperature Protection	Integrated	
Residual Current Protection	Integrated	
Islanding Protection	Integrated(Frequency shift)	
AC Over-voltage Protection	Integrated	
Overload Protection	Integrated	
AC Short-circuit Protection	Integrated	
General Data		
Over Voltage Category	PV: II; Main: III	
Dimensions (W×H×D)	534*418*210mm	
Weight	31.0kg	
Protection Degree	IP65	
Standby Self-consumption	<15W	
Topology	Transformerless	
Operating Temperature Range	-30~60°C	
Relative Humidity	0-100%	
Operating Altitude	3000m (>3000mderating)	
Cooling	Natural Convection	
Noise Level	<40dB	
Display	OLED & LED	
Communication	CAN, RS485,WiFi/LAN (Optional)	
Certifications	IEC 62109, EN 61000, EN50549-1, G98, G99, G100, CEI, NRS 097, NTS, VDE-4105, CEI 0-21, NEN	
Warranty	10 years	

* PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting.

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.

1) G98: 10.5kVA; 2)G98: 16.00A; 3) AS 4777.2: 15.0kVA; 4) AS 4777.2: 21.7A