



Three Phase Hybrid Inverter

HESS-HY-T-08K/10K/12K

Easy-to-install

- ✓ Phoenix Contact connectors for reliable tool-free DC connection
- ✓ Compact wall mount design
- ✓ Simple battery and smart meter interfaces
- ✓ Compatible with high-voltage batteries

Reliable

- ✓ IP66 rated design for outdoor use
- ✓ 150 % PV over-sizing array
- ✓ 100% unbalanced three phase AC output
- ✓ ShadeSol - improved generation under non-ideal conditions
- ✓ UPS level switching time < 10 ms

User-friendly

- ✓ Commissioning and monitoring via the Hanchu ESS app
- ✓ Intelligent work modes and customized battery management for DOD /Time of Use/Power Setting
- ✓ Max. 20 A input current, ideal for bifacial and large scale PV modules

“Power Your Home
Power Your Life”

Three Phase Hybrid Inverter

Model	HESS-HY-T-08K	HESS-HY-T-10K	HESS-HY-T-12K
PV Input			
Max. PV array power	12000 Wp	15000 Wp	18000 Wp
Max. input voltage	1100 V		
MPP voltage range / rated input voltage	200 V to 950 V / 630 V		
Min. input voltage / start voltage	60 V / 180 V		
No. of independent MPP trackers/ strings per MPPT input	2 / 1		
Max. input current per MPP tracker	20 A		
Max. short-circuit current per MPP tracker	30 A		
Battery Input			
Battery voltage range	120 V to 600 V		
Max. charging / discharging power	8000 W	10000 W	12000 W
Max. charging current /Max. discharging current	36 A		
Rated charging current /Rated discharging current	30 A		
Battery type	LiFePO4		
AC Output			
AC voltage range /Nominal AC voltage	270 V to 480 V /3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 415V		
Rated AC grid frequency	50 Hz / 60 Hz		
AC grid frequency range	45-55 Hz /55-65 Hz		
Rated apparent power	8000 VA	10000 VA	12000 VA
Max. apparent power	8000 VA	10000 VA	12000 VA
Rated grid output current(@400V)	11.6 A	14.5 A	17.4 A
Max. grid output current(@400V)	12.8 A	16.0 A	19.2 A
Harmonics THDi (@ Nominal power)	<3% (of nominal power)		
AC Input			
Rated grid voltage	3/N/PE, 220 / 380 V; 230 / 400 V; 240 /415 V		
Rated grid frequency	50 Hz / 60 Hz		
Max. input power from grid	16000 W	20000 W	24000 W
Max. input current from grid	23.2 A	29.0 A	34.8 A
EPS Output			
Nominal output voltage	3/N/PE, 220 / 380 V; 230 / 400 V; 240 /415 V		
Nominal output frequency	50 Hz / 60 Hz		
Rated apparent power	8000 VA	10000 VA	12000 VA
Peak output apparent power	2 times of rated power, 10 s		
Rated current(@400V)	11.6 A	14.5A	17.4 A
Max. switch time	< 10 ms		
Output THDv(@ Linear load)	2%		
Efficiency			
MPPT efficiency	99.9 %		
Euro efficiency / Max. efficiency	97.9 % / 98.4 %		

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Safety Protection			
DC surge protection (Type II, according to EN/IEC 61643-11)		•	
Insulation resistance detection		•	
PV string input reverse polarity protection		•	
Battery input reverse polarity protection		•	
Ground fault monitoring		•	
Residual current monitoring unit		•	
AC short circuit protection		•	
Anti-islanding protection		•	
General Data			
Power factor at rated power /adjustable displacement		1 / 0.8 leading to 0.8 lagging	
Dimensions (W / H / D)		545 / 465 / 205 mm	
Weight		24.5 kg	
Operating temperature range		-25°C ... +60°C	
Cooling concept		Natural convection	
Degree of protection(as per IEC 60529)		IP66	
Max. relative humidity		100 %	
Max. operating altitude		4000 m	
Features			
User interface		LED & APP	
BMS interface		CAN	
Smart meter interface		RS485	
Internet communication interfaces		WiFi / LAN / 4G	
Digital output (dry contact) /No. of outputs		• / 2	
Digital input (dry contact) /No. of inputs		• / 4	
Integrated power control /export power control		• / •	




Product Info.




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