

# 10-20 kW

Hengtong Energy Storage All-in-One is specially designed for residential, small commercial, and industrial applications. It features a compact size, high efficiency, multiple protection functions, safety, reliability, intelligent stability, and a high protection level of up to IP65. It exhibits strong adaptability to various environmental conditions.



## HELIOS HT20K Residential Three-Phase Hybrid Inverter

Millisecond-level switching between grid-connected and off-grid modes, supporting seamless and uninterrupted intelligent switching.

Protection level up to IP65, wall-mounted design, space-saving.

Operates worry-free at high altitudes or in harsh conditions such as severe cold, ensuring stable and reliable performance.

Two charging modes available: photovoltaic and grid power.

Residential Smart Energy Management Terminal.

One-piece molding process, lightweight design.



SiC Technology  
98.2% Efficiency



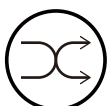
2 Independent Battery  
Ports for Mixture Use  
of Old & New Battery



Supports 130-200%  
Instant Overload(60s)



Support Altitude  
5000m(>3000m Derating)



Support AC Couple



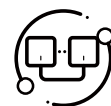
1.5 Times DC/AC Ratio



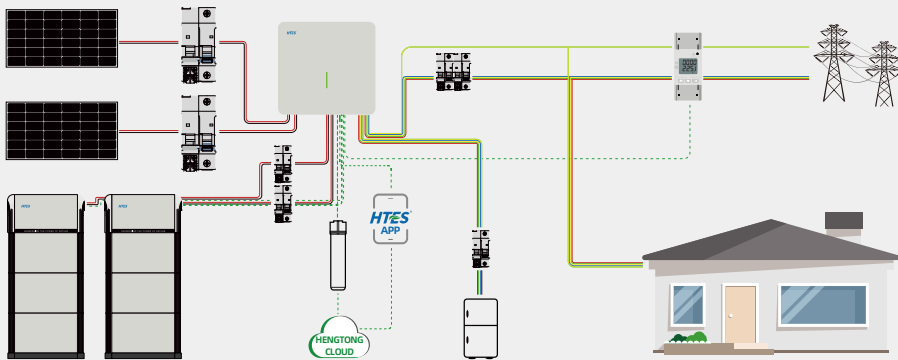
Max. Grid Current  
Ratio 1:1.8



support 100% Three  
Phase Unbalance



15 Units Parallel



Model Name	HT-HBI-T10SH V1	HT-HBI-T12SH V1	HT-HBI-T15SH V1	HT-HBI-T18SH V1	HT-HBI-T20SH V1	
Off-grid Output	Nominal Output Power	10kW	12kW	15kW	18kW	20kW
	Nominal Voltage	3/N/PE.220/380Vac.230/400Vac				
	Nominal Frequency	50/60Hz				
	Nominal Output Current	15A	18A	22.5A	27A	30A
	Output THDu	<3%				
On-grid Parameter	Nominal Output Power	10kW	12kW	15kW	12kW	20kW
	Max. Output Power	11kVA	13.2kVA	16.5kVA	19.8kVA	22kVA
	Max. Output Current from Grid	29A	35A	44A	52A	60A
	Max. Output Current	16A	20A	24A	29A	32A
	Grid Voltage Range	184-276V/320-480V				
Nominal Grid Voltage	3/N/PE.220/380.230/400V.240/415V					
PV Input	Max.Input Power	20000Wp	24000Wp	30000Wp	30000Wp	30000Wp
	Starting Voltage	200V				
	Max.Input Voltage	1000V				
	MPPT Voltage Range	180-960V				
	Full Load MPPT Voltage Range	250-850V	290-850V	350-850V	410-850V	450-850V
	Number of MPPT	2				
	Max.Input String Per MPPT	2				
	Nominal Input Voltage	600V				
Max.Input Current	30A/30A					
Efficiency	Max. Efficiency	98.2%				
	European Efficiency	97.7%				
	Max. Battery Charging/Discharging Efficiency	97.8%				
General Data	Size(W*H*D)	573mm*509mm*219mm				
	Weight	35kg				
	Noise	<45dB(A)				
	Operating Temperature Range	-25°C~+60°C				
	Cooling Method	Air cooling				
	Ingress Protection Grade	IP65				
	Monitoring	APP/LED/WIFI/4G/Bluetooth				
	Communication Port	RS485/CAN/DRED/Dry contact/Parallel port				
Protection	DC Switch, AC Overvoltage Protection, AC Overcurrent Protection, AC Short Circuit Protection, Anti-islanding Protection, Residual Current Monitoring, PV Insulation Resistance Detection, Surge Protection: LEVEL II Reverse Polarity Protection(PV&Battery); Lightning Protection					
Certification	CE_LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2				
	CE EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN 62920				
	Grid	VDE-AR-N 4105, C10-11, G98/G99, CEI 0-21, AS 4777.2, R25, UNE217001, UNE217002, NTS 2.1 AS4777.2:2020+Amd 1:2021, PEA, MEA, IEC 61727, IEC 62116, NC RfG, EN50549NRS 097-2-1				