

# SN20/25/29.9/30/33HT

## Three Phase Hybrid Inverter/3MPPTs

- Dual Battery Interfaces**  
 Run your heavy appliances with ease.
- Ultra-wide Battery Compatibility**  
 Easy to match, easy to use.
- Auto Three-phase Meter Setup**  
 Power on, ready to go.
- 1.5× PV Overload Input**  
 Store more solar power for daily use.
- 110% Unbalanced Three-phase Output**  
 More appliances, no worries.
- Third-party Battery Compatible**  
 Easy to match, easy to use.



Model	SN20HT	SN25HT	SN29.9HT	SN30HT	SN33HT
<b>Input (PV)</b>					
Recommended max. PV power (STC)	30000W	37500W	45000W	45000W	45000W
Max. PV input voltage <sup>(1)</sup>			1000V		
Startup voltage			180V		
Nominal PV input voltage			620V		
MPPT operating voltage range <sup>(2)</sup>			160V~950V		
Number of PV inputs	5 (3MPPTs, 2/2/1)		6 (3MPPTs, 2/2/2)		
Max. input current per MPPT	32A/32A/20A		40A/32A/32A		
Max. short circuit current per MPPT	50/50/25A		50/50/50A		
<b>Battery parameter</b>					
Battery type	Li-on				
Battery voltage range	180V~800V				
Max. charge/discharge current	50A*2				
Max. charge/discharge power	20000W	25000W	30000W	30000W	33000W
<b>Grid input/output</b>					
Nominal grid output power	20000W	25000W	29900W	30000W	33000W
Max. grid output power	22000VA	27500VA	29900VA	33000VA	33000VA
Max. grid output current	33.4A@220V, 31.9A@230V, 30.6A@240V	41.7A@220V, 39.9A@230V, 38.2A@240V	45.4A@220V, 43.4A@230V, 41.6A@240V	50A@220V, 47.9A@230V, 45.9A@240V	50A@220V, 47.9A@230V, 45.9A@240V
Max. input power from grid	37500VA	37500VA	42900VA	42900VA	42900VA
Max. input current from grid	56.9A	56.9A	65.0A	65.0A	65.0A
Nominal grid voltage	3L/N/PE, 220/380V; 230/400V; 240/415V				
Nominal grid frequency	50/60Hz				
Harmonic(THD)	<3%				
Power factor range	0.8leading~0.8lagging				
<b>Back-up data</b>					
Rated output power	20000W	25000W	30000W	30000W	33000W
Peak output power	30000VA, 10s; 24000VA, 60s	37500VA, 10s; 30000VA, 60s	42900VA, 10s; 36000VA, 60s	42900VA, 10s; 36000VA, 60s	42900VA, 10s; 36000VA, 60s
Back up switch time	10ms				
Nominal output voltage	3L/N/PE, 220/380V; 230/400V; 240/415V				
Nominal output frequency	50/60Hz				
<b>Efficiency</b>					
Max. efficiency	98.3%				
EU efficiency	97.5%				
<b>Protection</b>					
Anti islanding protection	Yes				
Leakage current protection	Yes				
PV reverse protection	Yes				
Short circuit protection	Yes				
Arc-fault circuit-interrupter	Yes				
RSD	Optional				
Surge protection	DC II/AC II				
Battery reverse protection	Yes				
<b>General data</b>					
Dimensions (W*H*D)	680*554*268mm				
Weight	41kg		42kg		
Installation method	Wall-mounted				
Topology	Transformerless				
Protection degree	IP66				
Operating temperature	-25 ~ 60°C				
Humidity	0 ~ 100%				
Cooling method	Smart fan cooling				
Max. operating altitude	4000m (>3000m derating)				
Display	LED+Bluetooth/APP				
Communication method	Wifi/4G/Ethernet, RS485, CAN				
IEC61000-6-3/-2, IEC61000-3, IEC62920, IEC62109-1/-2, IEC62116, IEC61727, IEC61683, IEC60068, EN50549-1/-10, EN62477, FD C11-519-11, CEI 0-21, NRS097-2					

(1) Exceeding the maximum input voltage will damage the inverter and trigger its self-protection mechanism.  
 (2) DC input voltage beyond the MPPT operating voltage range will cause the inverter to be out of work.