



Data sheet



Three Phase Hybrid Inverter

8. Datasheet

MODE	PTSI-NH 10000-160-3P	PTSI-NH 15000-160-3P	PTSI-NH18000 (20000)-160-3P	PTSI-NH 25000-160-3P	PTSI-NH 30000-160-3P	PTSI-NH 40000-160-3P	PTSI-NH 50000-160-3P
Battery Input Data							
Battery Type	Lithium-ion						
Battery Voltage Range (V)	160-700			160-700	160-800		
Max. Charging Current (A)	37			50	50+50		
Max. Discharging Current (A)	37			50	50+50		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS						
Number of Battery Input	1			1	2		
PV String Input Data							
Max. DC Input Power(W)	13000	19500	26000	32500	39000	52000	65000
Max. DC Input Voltage (V)	1000						
Start-up Voltage (V)	180						
MPPT Voltage Range(V)	150-850						
Full Load MPPT Voltage Range(V)	325-850	420-850	500-850	625-850	360-850	360-850	450-850
Rated DC Input Voltage (V)	600	600	600	700	600	600	600
PV Input Current (A)	20+20	26+20	26+26	26+26	36+36+36	36+36+36+36	36+36+36+36
Max. PV Isc (A)	30+30	39+30	39+39	39+39	55+55+55	55+55+55+55	55+55+55+55
No.of MPP Trackers	2	2	2	2	3	4	4
No.of Strings per MPP Tracker	1+1	2+1	2+2	2+2	2+2+2	2+2+2+2	2+2+2+2
AC Input/Output Data							
Rated AC Output Power (W)	10000	15000	20000	25000	30000	40000	50000
Max. AC Output Power (W)	11000	16500	22000	27500	33000	44000	55000
Peak Power (Off Grid)	1.5 time of rated power, 10 S						
AC Input/Output Rated Current(A)	15.2/14.5	22.8/21.8	30.4/29.0	37.9/36.3	45.5/43.5	60.7/58.0	75.8/72.5
Max. AC Input/Output Current(A)	16.7/16	25/24	33.4/31.9	41.7/39.9	50/47.9	66.7/63.8	83.4/79.8
Max. Three-phase Unbalanced Output Current(A)	22	30	35	41.7	60	70	83.4
Max. Continuous AC Passthrough (grid to load)(A)	40	80	80	80	200	200	200
Power Factor	0.8 leading to 0.8 lagging						
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac						
Grid Type	Three Phase						
Total Harmonic Distortion	<3%(of nominal power)						
DC Injection Current	<0.5% In						
Efficiency							
MAX. efficiency	97.6%						
Euro efficiency	97.0%						
MPPT efficiency	>99%						
Protection							
Anti-islanding Protection	Yes						
PV String Input Reverse Polarity Protection	Yes						

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Insulation Resistor Detection	Yes						
Residual Current Monitoring Unit	Yes						
Output Over Current Protection	Yes						
Output Shorted Protection	Yes						
Surge Protection	Yes						
Arc Fault Circuit Interruption (AFCI optional)	Yes						
Over Voltage Category	DC TypeII/AC Type II						
Certifications and Standards							
Grid Regulation	IEC61727/62116,EN50549-1						
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						
General Data							
Operating Temperature Range(°C)	-25~+60°C,>45°C Derating				-40~+60°C,>45°C Derating		
Cooling	Smart Cooling						
Noise (dB)	<55 dB				<70dB		
Communication with BMS	CAN						
Monitoring mode	WIFI, APP						
Size (WxHxD mm) (Excluding Connectors and Brackets)	456×566 ×255	456×566 ×255	456×566 ×255	456×566 ×255	537×888 ×320.5	537×888 ×320.5	537×888 ×320.5
Weight (kg)	30				82.5		
Ingress Protection	IP65						
Installation Style	Wall-mounted						
Warranty	5 Years (10 Years Optional)						