

1-3 kW

SINGLE PHASE PV STRING INVERTER

The SunArk HNS Series Single-phase inverters are designed for residential PV system applications, rating from 1kW to 3kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. The unibody housing can ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.



Anti-Flow

Anti-Feed-in Function

MAX
1.5

PV Oversize

Max. 1.5 time PV Oversize Capacity



Protection

Multiple intelligent Protections



Smart

Smart IV Curve Scanning



Wi-Fi

Wi-Fi Standard Ethernet/GPRS Optional



Configuration

Quick & Easy Config. via Wi-Fi



Modbus

MODBUS Communication Ready

- MPPT efficiency > 99.9%
- Compact and light body design
- Active and reactive power compensation, adjust power factor

- No fans design
- Quick and easy installation
- AC output 1.1x continuous operation

PV Input Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1
Max. DC Power (W)	1500	2250	3000	3750	4200
Max. DC Voltage (V)	500	500	500	500	500
MPPT Voltage Range (V)	50-500	50-500	50-500	50-500	50-500
MPPT Full Power Voltage Range (V)	70-500	110-500	145-500	180-500	220-500
Rated Input Voltage (V)			360		
Start-up Voltage (V)			50		
Max. Input Current (A)			14		
Max. Short Current (A)			18		
No. of MPP Tracker/No. of PV String			1/1		
Input Connector Type			MC4		
AC Output Data					
Max. Output Power (W)	1100	1650	2200	2750	3300
Nominal Output Power (W)	1000	1500	2000	2500	3000
Max. Output Current (A)	6	9	12	13	15
Nominal Output Voltage (V)	L/N/PE, 220Vac, 230Vac, 240Vac				
Grid Voltage Range	180Vac-276Vac (According to local standard)				
Nominal Output Frequency (Hz)	50/60				
Grid Frequency Range	45-55Hz/54-66Hz (According to local standard)				
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)				
Output Current THD	<3%				
Efficiency					
Max. Efficiency	97.50%	97.80%	98.10%	98.10%	98.13%
Euro Efficiency	96.60%	96.70%	96.80%	97.23%	97.56%
Protection					
PV Reverse Polarity Protection			YES		
PV Insulation Resistance Detection			YES		
AC Short Circuit Protection			YES		
AC Over Current Protection			YES		
AC Over Voltage Protection			YES		
Anti-Islanding Protection			YES		
Residual Current Detection			YES		
Over Temperature Protection			YES		
Integrated DC switch			YES		
Surge Protection	Integrated (Type III)				
Smart IV Curve Scanning			YES		
Quick Arc Fault Circuit Interruption			Optional		
General Data					
Dimensions (W x H x D, mm)			280 x 260 x 116		
Weight (kg)			6		
Protection Degree			IP65		
Enclosure Material			Aluminum		
Ambient Temperature Range (°C)			-25 to 60		
Humidity Range			0-100%		
Topology	Transformer less				
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)				
Cooling Concept	Convection				
Noise Emission (db)			<21		
Night Power Consumption (W)	<0.2				<1
Max. Operation Altitude (m)			4000		
Certifications and Standards					
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12				
Safety Standard	IEC 60068, UL1741, EN62109				
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, IEC61727				