

3-6 kW

# SINGLE PHASE PV STRING INVERTER

The SunArk HNS Series Single-phase inverters are designed for residential PV system applications, rating from 3kW to 6kW. All models have unibody housings with aluminum structure which is anodized, increasing durability and effectively prevents corrosion. Equipped with external Inductors, the unibody housings 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%
- Two MPPT design
- Active and reactive power compensation, adjust power factor

- No fans design
- Quick and easy installation
- High-quality power output and low THDI

PV Input Data	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL
Max. DC Power ( W )	4500	5400	6000	7000	8400
Max. DC Voltage ( V )	600	600	600	600	600
MPPT Voltage Range ( V )	70-500	70-550	70-550	70-550	70-550
MPPT Full Power Voltage Range ( V )	110-550	130-550	140-550	180-550	220-550
Rated Input Voltage ( V )			360		
Start-up Voltage ( V )			70		
Max. Input Current ( A )			14 x 2		
Max. Short Current ( A )			18 x 2		
No. of MPP Tracker/No. of PV String			2/2		
Input Connector Type			MC4		
AC Output Data					
Max. Output Power ( W )	3300	3960	4400	5500	6600
Nominal Output Power ( W )	3000	3600	4000	5000	6000
Max. Output Current ( A )	15	17.5	20	24	28.7
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	98.20%	98.20%	98.20%	98.20%	98.20%
Euro Efficiency	97.80%	97.82%	97.85%	97.90%	97.92%
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 )			358 x 360 x 142		
Weight ( kg )			10		
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 )			<28		
Night Power Consumption ( W )			<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				