Single Phase PV String Inverter
1-3 kW

Single Phase PV String Inverter
3-6 kW

Single Phase PV String Inverter
7-10 kW

Technical Data	HNS1000TL-1	HNS1500TL-1	HNS2000TL-1	HNS2500TL-1	HNS3000TL-1	HNS3000TL	HNS3600TL	HNS4000TL	HNS5000TL	HNS6000TL	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
PV Input Data														
Max. DC Power (W)	1500	2250	3000	3750	4200	4500	5400	6000	7000	8400	9800	11200	12600	14000
Max. DC Voltage (V)	500	500	500	500	500	600	600	600	600	600	600	600	600	600
MPPT Voltage Range (V)	50 - 500	50 - 500	50 - 500	50 - 500	50 - 500	70 - 550	70 - 550	70 - 550	70 - 550	70 - 550	70 - 550	70 - 550	70 - 550	70 - 550
MPPT Full Power Voltage Range (V)	70 - 500	110 - 500	145 - 500	180 - 500	220 - 500	110 - 550	130 - 550	145 - 550	180 - 550	220 - 550	220 - 550	220 - 550	220 - 550	220 - 550
Rated Input Voltage (V)	360					360					360			
Start-up Voltage (V)	50					70					70			
Max. Input Current (A)	14					14 x 2					14+26		26+26	
Max. Short Current (A)	18					18 x 2					18+35		35+35	
No. of MPP Tracker / No. of PV String	1/1					2/2					2/3		2/4	
Input Connector Type	MC4					MC4					MC4			
AC Output Data														
Max. Output Power (VA)	1100	1650	2200	2750	3300	3300	3960	4400	5500	6600	7700	8800	9900	11000
Nominal Output Power (W)	1000	1500	2000	2500	3000	3000	3600	4000	5000	6000	7000	8000	9000	10000
Max. Output Current (A)	6	9	12	13	15	15	17.5	20	24	28.7	33.6	38.3	45	50
Nominal Output Voltage (V)	L/N/PE, 220Vac, 230Vac, 240Vac					L/N/PE, 220Vac, 230Vac, 240Vac					L/N/PE, 220Vac, 230Vac, 240Vac			
Grid Voltage Range	180Vac-276Vac (According to local standard)					180Vac-276Vac (According to local standard)					180Vac-276Vac (According to local standard)			
Nominal Output Frequency (Hz)	50/60					50/60					50/60			
Grid Frequency Range	45-55Hz/54-66Hz (According to local standard)					45-55Hz/54-66Hz (According to local standard)					45-55Hz/54-66Hz (According to local standard)			
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)					1 default (adjustable from 0.8 leading to 0.8 lagging)					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%	98.20%	98.20%	98.20%	98.20%	98.20%	98.20%	98.20%	98.32%	98.40%
Euro Efficiency	96.60%	96.70%	96.80%	97.23%	97.56%	97.80%	97.82%	97.85%	97.90%	97.92%	97.95%	98.00%	98.00%	98.10%
Protection														
PV Reverse Polarity Protection	YES					YES					YES			
PV Insulation Resistance Detection	YES					YES					YES			
AC Short Circuit Protection	YES					YES					YES			
AC Over Current Protection	YES					YES					YES			
AC Over Voltage Protection	YES					YES					YES			
Anti-Islanding Protection	YES					YES					YES			
Residual Current Detection	YES					YES					YES			
Over Temperature Protection	YES					YES					YES			
Integrated DC switch	YES					YES					YES			
Surge Protection	Integrated (Type III)					Integrated (Type III)					Integrated (Type III)			
Smart IV Curve Scaning	YES					YES					YES			
Quick Arc Fault Circuit interruption	Optional					Optional					Optional			
General Data														
Dimensions (W x H x D, mm)	280 x 260 x 116					360 x 358 x 142					370 x 535 x 192			
Weight (kg)	6					10					17		18	
Protection Degree	IP65					IP66					IP66			
Enclosure Material	Aluminum					Aluminum					Aluminum			
Ambient Temperature Range (°C)	-25 - +60					-25 - +60					-25 - +60			
Humidity Range	0 - 100%					0 - 100%					0 - 100%			
Topology	Transformerless					Transformerless					Transformerless			
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)					RS485 / WiFi / Wire Ethernet / GPRS (optional)					RS485 / WiFi / Wire Ethernet / GPRS (optional)			
Cooling Concept	Convection					Convection					Convection		Intelligent fan cooling	
Night Power Consumption (W)	<0.2	<0.2	<1	<1	<1	<1					<1			
Max. Operation Altitude (m)	4000					4000					4000			
Certifications and Standards														
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-2, EN61000-3-3					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					IEC 60068, UL1741, EN62109								
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G98, IEC61727					IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G99, IEC61727								