

Navgrun

SMART ENERGY. **STRONGER FUTURE.**

Advanced Inverters for
Maximum Performance



**HIGH
EFFICIENCY**



**SMART
MONITORING**



**RELIABLE
PROTECTION**

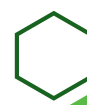


**SUSTAINABLE
ENERGY**

Nithin Sai Renewables Pvt Ltd

 www.navgrun.com

 info@navgrun.com



Grid Tied Solar String Inverters

1.1 kW to 3.3 kW – Single Phase (1000 VDC)

Key Features

- Wide DC input range
- Transformer less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 1 independent MPPT to ensure optimal energy harvest
- MPPT accuracy is more than 99.9%
- Wide operating temperature range from -30°C to 60°C
- IP 65 protection for Indoor & outdoor application
- Easy to install & maintain
- DC power overloading
- User friendly interface like RS 485/Wi-Fi
- Easy to read LCD display with all operational status & necessary data as per requirement
- Type III SPD (Surge Protection Device)
- Remote monitoring using a mobile based application through GPRS/Wi-Fi



Technical Standards

No	IEC Standard	IEC Certificate
1	Environmental Testing	IEC 60068-2 (1,2,14,30)
2	Efficiency Measurement	IEC 61683
3	Product Safety Standard	IEC 62109-1, 2
4	Grid Connectivity Standard/ Utility Interface	IEC 61727
5	Test Procedure for Islanding Prevention Measures for Utility Interconnected PV Inverters	IEC 62116
6	Electromagnet Compatibility & Electro Magnet Interference	IEC 61000-6-2 IEC 61000-6-4

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Technical Specifications

Solar String Inverter 1.1 Kw To 3.3 Kw (1Ph.)

INVERTER- SERIES SINGLE PHASE WITH SINGLE MPPT		SI-1.1K-H3	SI-1.6K-H3	SI-2.2K-H3	SI-2.7K-H3	SI-3K-H3	SI-3.3K-H3
Input (DC)	Recomended PV Input Power	1500W	2200W	3000W	3700W	4100W	4500W
	Max. Input Voltage	500V	500V	500V	550V	550V	550V
	Start-Up Input Voltage	70V					
	Rated Input Voltage	360V					
	MPPT Voltage Range	50-500V			50-550V		
	Full Load Dc Voltage Range	110-450V	150-450V	200-450V	250-500V	275-500V	300-500V
	Max. Input MPPT Current	12A					
	Max Dc Input Short Circuit Current per MPPT	15A					
	Number of MPPT/String Per MPPT	1/1					
	Input Terminal Type	MC4					
Output(AC)	Rated Power	1.1KW	1.6KW	2.2KW	2.7KW	3KW	3.3KW
	Max. AC Power	1.1 KVA	1.6 KVA	2.2 KVA	2.7 KVA	3 KVA	3.3 KVA
	Max. Output Current	5.3 A	7.7 A	10.6 A	13 A	14.5 A	16 A
	Nominal Grid Voltage	L / N / PE, 230 Vac					
	Grid Voltage Range	180 Vac-276 Vac(According to Local Standard)					
	Nominal Frequency	50/60 Hz					
	Grid Frequency Range	45-55Hz / 55-66Hz (According to Local Standard)					
	THDi	<3%					
	Power Factor	1 default (adjustable ±0.8)					
Efficiency Up To	Max.Efficiency Up to	97.43%	97.50%	97.47%	97.38%	97.20%	97.20%
	European Weighted Efficiency	96.9%			97.2%		
Protection	Anti islanding Protection	YES					
	DC Reverse Polarity Protection	YES					
	Over Temp Protection	YES					
	Leakage Current Protection	YES					
	Over Voltage Protection	YES					
	over Current protection	YES					
	Earth Fault Protection	YES					
	SPD	MOV: Type III standard					
Communication	Standard Communication Mode	Rs 485,USB(Optional: Wi-Fi / Ethernet					
General Data	Topology	Transformer less					
	Ambient Temperature Range	-30°C ~ +60°C					
	Allowed Relative Humidity Range	0-100%					
	Noise	<25 dB					
	DC Switch	Optional					
	Cooling	Natural Convection					
	Max. Operating Altitude	2000 m					
	Dimensions	303 x 260.5 x 118 mm			321 x 260.5 x 131.5 mm		
	Support Bracket	Wall - Mounted					
	Weight	5.5 Kg			6.3 Kg		
	Display	LCD+LED					
	Degree of Protection	IP 65					
Standard	EMC	EN 61000 - 6 - 1, EN 61000 - 6 - 2, EN 61000 - 6 - 3, EN 61000 -6 - 4,					
	Safety Standards	,IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109 - 1/2					
	Grid Standards	AS 4777, VDE V 0124 - 100, VDE V 0126 - 1 - 1, VDE -AR -N 4105, EN 50438, G83 / 2, C10 / 11, RD 1699					

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Contact Us

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Factory

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