

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

3.3 Kw to 12 Kw – Three Phase (1100 VDC)

Key Features

- Wide DC Input range
- True three phase bridge, transformer-less topology
- Low sensitivity to the grid disturbance to avoid unnecessary disconnection from the grid
- 2 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 II SPD (Surge Protection Device)



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 3.3 Kw To 12 Kw(3Ph.)

INVERTER- SERIES SINGLE PHASE WITH DUAL MPPT		SI-3.3K-N	SI-4.4K-N	SI-5.5K-N	SI-6.6K-N	SI-8.8K-N	SI-11K-N	SI-12K-N
Input (DC)	Recomended PV Input Power	4.5KWp	6KWp	7.5KWp	9KWp	12KWp	15KWp	18KWp
	Number of Independent MPPT	2						
	Number of DC Inputs	1/1	1/1	1/1	1/1	1/1	1/1	1/2
	Max. Input Voltage	1100 V						
	Start-Up Input Voltage	160 V						
	Rated Input Voltage	650 V						
	MPPT Operating Voltage Range	140-1000 V						
	Full Power MPPT Voltage Range	160 ~ 850V	190 ~ 850V	240 ~ 850V	290 ~850V	380 ~ 850V	420 ~ 850V	460 ~ 850V
	Max. Input Current per MPPT	15A / 15A	15A / 15A	15A / 15A	15A / 15A	15A / 15A	15A / 15A	15A / 30A
	Max Dc Input Short Circuit Current per MPPT	22.5A / 22.5A	22.5A / 22.5A	22.5A / 22.5A	22.5A / 22.5A	22.5A / 22.5A	22.5A / 22.5A	22.5A / 45A
Output(AC)	Rated Power	3Kw	4Kw	5Kw	6Kw	8Kw	10Kw	12Kw
	Max. AC Power	3.3 KVA	4.4 KVA	5.5 KVA	6.6 KVA	8.8 KVA	11 KVA	13.2 KVA
	Max. Output Current	5 A	6.7 A	8.3 A	10 A	13.3 A	16.7 A	20 A
	Nominal Grid Voltage	3 / N / PE, 240 Vac						
	Grid Voltage Range	310 Vac ~ 480 Vac (According to Local Standard)						
	Nominal Frequency	50/60 Hz						
	Grid Frequency Range	45-55Hz / 55-66Hz (According to Local Standard)						
	Active Power Adjustable Range	0-100%						
	THDi	<3%						
	Power Factor	1 default (adjustable ±0.8)						
Efficiency Up To	Max.Efficiency Up to	98.18%	98.26%	98.23%	98.23%	98.33%	98.34%	98.30
	European Weighted Efficiency	97.50%				98.00%		
	Self-Consumption at night	<1W						
Protection	DC Reverse Polarity Protection	YES						
	Anti islanding Protection	YES						
	Ground Fault Monitoring	YES						
	PV -Array String Fault Monitoring	YES						
	Anti-Reverse Power Function	YES						
	DC Switch	YES						
	Input / Output SPD	PV: Type II standard, AC: Type II Standard						
Communication	Standard Communication Mode	Rs 485 / USB / Bluetooth(Optional: Wi-Fi)						
General Data	Ambient Temparature Range	-30°C ~ +60°C						
	Topology	Transformer less						
	Degree of Protection	IP 65						
	Allowed Relative Humidity Range	0-100%						
	Max. Operating Altitude	4000 m						
	Noise	<40 dB						
	Weight	17 kg			18Kg			
	Cooling	Natural						
	Dimensions	430*385*182 mm						
	Display	LCD & Bluetooth + APP						
	Standard Warrenty	5 Years (Optional: 7 & 10 Years)						
Standard	EMC	EN 61000 - 3 - 2, EN 61000 - 3 - 3, EN 61000 - 3 - 11, EN 61000 -3 - 12, EN 61000 - 6 - 1, EN 61000 - 6 - 3						
	Safety Standards	IEC 62109 - 1/2 ,IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 60255						
	Grid Standards	AS/NZS 4777, VDE V 0124 - 100, VDE V 0126 - 1 - 1, VDE -AR -N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1,EN50549, G98/G99, EN50549, G98/G99, EN50530, NB/T32004						

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Contact Us

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