

Navgrun

SMART ENERGY. **STRONGER FUTURE.**

Advanced Inverters for
Maximum Performance



**HIGH
EFFICIENCY**



**SMART
MONITORING**



**RELIABLE
PROTECTION**

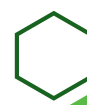


**SUSTAINABLE
ENERGY**

Nithin Sai Renewables Pvt Ltd

 www.navgrun.com

 info@navgrun.com



Grid Tied Solar String Inverters

15 Kw to 20 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)
- 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

Nithin Sai Renewables Pvt Ltd

 www.navgrun.com

 info@navgrun.com



Technical Specifications

Solar String Inverter 15 Kw To 20 Kw(3Ph.)

INVERTER- SERIES SINGLE PHASE WITH DUAL MPPT		SI-15K-N	SI-20K-N
Input (DC)	Recomended PV Input Power	22.5 KWp	30 KWp
	Number of Independent MPPT	2	
	Number of DC Inputs	2 / 2	
	Max. Input Voltage	1100 V	
	Start-Up Input Voltage	160 V	
	Rated Input Voltage	650 V	
	MPPT Voltage Range	140-1000 V	
	Full Load Dc Voltage Range	420 - 850 V	480 - 850V
	Max. Input MPPT Current	26A / 26A	26A / 26A
	Max Dc Input Short Circuit Current per MPPT	36A / 36A	36A / 36A
Output(AC)	Rated Power	15 Kw	20 Kw
	Max. AC Power	16.5 KVA	22 KVA
	Max. Output Current	23.9 A	31.9 A
	Nominal Grid Voltage	3 / N / PE, 230 V / 400 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	98.60%	
	European Weighted Efficiency	98.20%	
	Self-Consumption at night	<1W	
	MPPT Efficiency	>99.9%	
Protection	Anti islanding Protection	YES	
	DC Reverse Polarity Protection	YES	
	Leakage Current Protection	YES	
	Ground Fault Monitoring	YES	
	PV -Array String Fault Monitoring	YES	
	Anti-Reverse Power Function	OPTIONAL	
	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 / Ethernet)	
General Data	Ambient Temparature Range	-30°C ~ +60°C	
	Topology	Transformer less	
	Degree of Protection	IP65	
	Allowed Relative Humidity Range	0-100%	
	Max. Operating Altitude	4000 m	
	Noise	<40 dB	
	Weight	20 kg	22Kg
	Cooling	Fan	
	Dimensions	520*430*189 mm	
	Display	LCD & Bluetooth + APP	
	Standard Warrenty	5 Years (Optional: 7 & 10 Years)	
Standard	EMC	EN 61000 - 6 - 1, EN 61000 - 6 - 3, EN 61000 - 6 - 3 - 11, EN 61000 - 6 - 3 - 12	
	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	

Nithin Sai Renewables Pvt Ltd

 www.navgrun.com
 info@navgrun.com
 +91 96060 80780

Contact Us

Corporate Office
Balsa N1, 2nd Floor, Embassy Manyata
Business Park, Outer Ring Road, Nagavara,
Rachenahalli Village, KR Puram Hobli,
Bangalore, India - 560045

Factory
Plot No. 75-A, 2nd Phase, KIADB Industrial
Area, Chintamani Taluk, Mastenahalli
Industrial Area, Chikkaballapur,
Karnataka - 563128