

Navgrun

SMART ENERGY. **STRONGER FUTURE.**

Advanced Inverters for
Maximum Performance



**HIGH
EFFICIENCY**



**SMART
MONITORING**



**RELIABLE
PROTECTION**



**SUSTAINABLE
ENERGY**



Nithin Sai Renewables Pvt Ltd

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SOLAR ON-GRID INVERTERS

Navgrun

Reliable | Efficient | Rugged

Single Phase: 1kW, 2kW, 3kW, 5kW, 6kW

Three Phase: 5kW, 6kW, 8kW, 10kW, 12kW, 15kW, 20kW, 25kW, 30kW, 33kW, 35kW, 40kW, 50kW, 60kW, 70 kW, 80kW, 90 kW, 100kW, 110kW, 120kW, 125kW, 136kW, 150kW, 200kW, 250kW

KEY FEATURES

- Compact Design For Easy Installation
- Wide Input Voltage & Frequency Range
- Natural Cooling / Forced Air Cooling
- Mobile App Monitoring
- Remote Monitoring (GPRS & WIFI)
- DC Overloading up to 30%
- AC Overloading up to 10%
- Transformerless Grid - Tie Technology
- Dual/Multi MPPT Design
- Built in Surge Protection design For AC & DC side.
- Optional: Zero Export, Weather Monitoring

IEC STANDARDS

Energy Efficiency - IEC 61683

Environmental - IEC 60068-2-1, 2, 14, 30

Safety - IEC 62109-1: IEC 62109-2

Anti Islanding - IEC 62116

Utility Interface - IEC 61727

EMC - IEC 61000

DC Connection - MC-4 Connector

AC Connection - LCD

Interface for GPRS/WIFI Monitoring
- RS485/RS232



Power-One offers the industry's widest range of on-grid solar string inverters from 1kW upto 250kW, We do offer variants that will enable Residential, commercial & Industrial Segment owners to benefit from remote app monitoring and future upgrade possibilities with end-to-end operation and maintenance support.



1-6kW On Grid
1-Phase Inverters



General Data	
Topology	Transformerless
Operating Temperature	-25°C ~ + 60°C
Ingress Protection	IP65
Noise Level	≤30 dB
Cooling	Natural Cooling
Humidity	0 ~ 100%

SYSTEM TECHNICAL DATA						
MODEL NAME	SGTU-101N	SGTU-102N	SGTU-103N	SGTU-104N	SGTU-105N	SGTU-106N
Capacity	1 Kw	2 Kw	3 Kw	3.3 Kw	5 Kw	6 Kw
DC INPUT						
Nominal Input DC Power(kW)	1	2	3	3.3	5	6
Max. DC Input Voltage(V)	500 V					
Start-up DC Input Voltage(V)	80	120				
MPPT Operating Voltage Range(V)	70-500	100-500				
Max. DC Input Current(A)	20A per MPPT					18A per MPPT
Number of MPP Trackers	1					2
Number of Strings per MPPT	1					1
AC OUTPUT						
Rated AC Output Power (kW)	1	2	3	3.3	5	6
Rated AC Grid Voltage(V)	230					
AC Grid Voltage Range(V)	140-295					
Rated Grid Frequency(Hz)	50					
Grid Frequency Range	45-55					
Operating Phase	Single Phase					
Rated AC Output Current (A)	4.3	8.7	13	14.3	22	26
THDi	≤3%					
Max Efficiency	96%	96.3%	96.6%	96.6%	96.8%	96.92%
Output Power Factor	0.8 Leading to 0.8 Lagging					

5-15kW On Grid
3-Phase Inverters



General Data	
Topology	Transformerless
Operating Temperature	-25°C ~ + 60°C
Ingress Protection	IP65
Noise Level	<55dB
Cooling	Intelligent/Forced Air Cooling
Humidity	0 ~ 100%

SYSTEM TECHNICAL DATA						
MODEL NAME	SGTU-105 3PN	SGTU-106 3PN	SGTU-108 3PN	SGTU-103N	SGTU-1253N	SGTU-153N
Capacity	5 Kw	6 Kw	8 Kw	10 Kw	12 Kw	15 Kw
DC INPUT						
Nominal Input DC Power(KW)	5	6	8	10	12	15
Max. DC Input Voltage(V)	1100					1000
Start-up DC Input Voltage(V)	140					250
MPPT Operating Voltage Range(V)	120-1000					200-850
Max. DC Input Current(A)	20A per MPPT					20+26A per MPPT
Number of MPP Trackers	2					2
Number of Strings per MPPT	1					1+2
AC OUTPUT						
Rated AC Output Power (kW)	5	6	8	10	12	15
Rated AC Grid Voltage(V)	400					
AC Grid Voltage Range(V)	140-295					
Rated Grid Frequency(Hz)	50					
Grid Frequency Range	45-55					
Rated AC Output Current (A)	7.2	8.6	11.5	14.5	17.2	21.5
THDi	≤3%					
Max Efficiency	96.8%	97.26%	97.37%	98.28%	97.56%	97.56%
Output Power Factor	0.8 Leading to 0.8 Lagging					

20–50kW On Grid
3–Phase Inverters



General Data	
Topology	Transformerless
Operating Temperature	-25°C ~ + 50°C
Ingress Protection	IP65
Noise Level	≤50dB
Cooling	Intelligent/Forced Air Cooling
Humidity	0 - 100% RH (Non-Condensing)

SYSTEM TECHNICAL DATA						
MODEL NAME	SGTU-203N	SGTU-253N	SGTU-333N	SGTU-353N	SGTU-403N	SGTU-503N
Capacity	20 Kw	25 Kw	33 Kw	35 Kw	40 Kw	50 Kw
DC INPUT						
Nominal Input DC Power(KW)	20	25	33	35	40	50
Max. DC Input Voltage(V)	1000					
Start-up DC Input Voltage(V)	250					
MPPT Operating Voltage Range(V)	200-850					
Max. DC Input Current(A)	26A per MPPT	40A per MPPT				
Number of MPP Trackers	2	2	2	2	3	4
Number of Strings per MPPT	2	3	3	3	3	3
AC OUTPUT						
Rated AC Output Power (KW)	20	25	33	35	40	50
Rated AC Grid Voltage(V)	400					
AC Grid Voltage Range(V)	320-480					
Rated Grid Frequency(Hz)	50					
Grid Frequency Range	45-55					
Operating Phase	Three Phase 3P+N+E					
Rated AC Output Current (A)	29	36	48	50	58	72
THDi	≤3%					
Max Efficiency	97.7%	98.61%	98.55%	98.51%	98.44%	98.29%
Output Power Factor	0.8 Leading to 0.8 Lagging					

60–110kW On Grid
3–Phase Inverters



General Data	
Topology	Transformerless
Operating Temperature	-25°C ~ + 60°C
Ingress Protection	IP65
Noise Level	<55dB
Cooling	Intelligent/Forced Air Cooling
Humidity	0 - 100%

SYSTEM TECHNICAL DATA						
MODEL NAME	SGTU-603N	SGTU-703N	SGTU-803N	SGTU-903N	SGTU-1003N	SGTU-1103N
Capacity	60 Kw	70 Kw	80 Kw	90 Kw	100 Kw	110 Kw
DC INPUT						
Nominal Input DC Power(KW)	60	70	80	90	100	110
Max. DC Input Voltage(V)	1000					
Start-up DC Input Voltage(V)	250					
MPPT Operating Voltage Range(V)	200-850					
Max. DC Input Current(A)	40A per MPPT					
Number of MPP Trackers	4	4		6		
Number of Strings per MPPT	3	4		4		
AC OUTPUT						
Rated AC Output Power (kW)	60	70	80	90	100	110
Rated AC Grid Voltage(V)	400					
AC Grid Voltage Range(V)	320-480					
Rated Grid Frequency(Hz)	50					
Grid Frequency Range	45-55					
Operating Phase	Three Phase 3P+N+E					
Rated AC Output Current (A)	86	100	115	129	144	157
THDi	≤3%					
Output Power Factor	0.8 Leading to 0.8 Lagging					
Max Efficiency	98.4%	98.4%	98.3%	98.32%	98.31%	98.31%

120–250kW On Grid 3-Phase Inverters



General Data

Topology	Transformerless
Operating Temperature	-25°C - + 60°C
Ingress Protection	IP65
Noise Level	≤65dB
Cooling	Intelligent/Forced Air Cooling
Humidity	0 - 100%

SYSTEM TECHNICAL DATA

MODEL NAME	SGTU-1253	SGTU-1303	SGTU-1363	SGTU-150	SGTU-200	SGTU-250
Capacity	125 Kw	130 Kw	136 Kw	150 Kw	200 Kw	250 Kw
DC INPUT						
Nominal Input DC Power(kW)	125	130	136	150	200	250
Max. DC Input Voltage(V)	1100			1500		
Start-up DC Input Voltage(V)	250			650		
MPPT Operating Voltage Range(V)	200-850			880-1300		
Max. DC Input Current(A)	40A per MPPT			26A per MPPT		
Number of MPP Trackers	8			12		
Number of Strings per MPPT	4			2		
AC OUTPUT						
Rated AC Output Power (kW)	125	130	136	150	200	250
Rated AC Grid Voltage(V)	400			500VAC	800VAC	
AC Grid Voltage Range(V)	320-480			400-621V	640-920V	
Rated Grid Frequency(Hz)	50			50		
Grid Frequency Range	45-55			45-55		
Operating Phase	Three Phase+N+E			Three Phase+N+E		
Rated AC Output Current (A)	179	186	195	157	126.2	162.4
THDi				≤3%		
Max Efficiency	98.8%	98.8%	98.8%	99%	99%	99%
MPPT Efficiency	99%	99%	99%	99.90%	99.90%	99.90%
Output Power Factor	0.8 Leading to 0.8 Lagging					

AJB

1	Enclosure	IP65 Outdoor/IP 21 Indoor
2	Fuse Holder	15A/32A
3	Voltage Range	600V/1000V

DCDB

1	Enclosure	IP65 Outdoor/IP 21 Indoor
2	MCB/MCCB	ISI Standard
3	SPD	20-40KA/2P/1000V DC SPD
4	PG Glands	ISI Standard
5	Voltage Range	600V/1000V

ACDB

1	Enclosure	IP65 Outdoor/IP 21 Indoor
2	MCB/MCCB	ISI Standard
3	SPD	20-40KA/4P/415V AC SPD-Type II
4	Voltage Range	230V/415V
5	Frequency	50Hz



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Contact Us

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Factory

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