

Technical Data



SGN1300TL
 SGN1800TL
 SGN2300TL
 SGN2700TL
 SGN3000TL

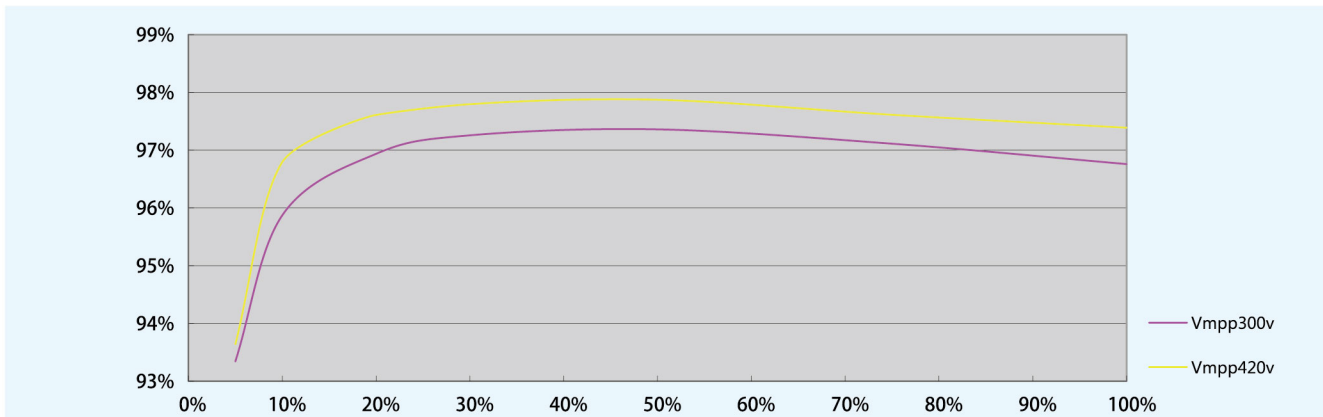
Features:

- > Maximum efficiency 98.0%
- > High efficiency across wide operation range
- > Wide range of input DC and MPPT voltage
- > Low turn-off DC voltage
- > IP65 protection against water and dust
- > DC switch option

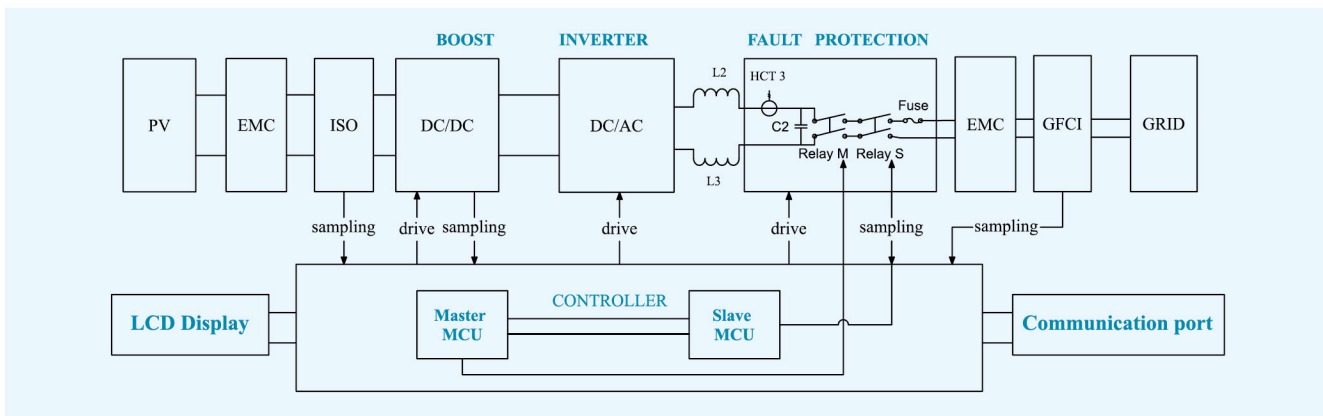
Certificates and Approvals:

CE, NB/T32004-2013(CQC), VDE AR-N-4105, VDE 0126-1-1+A1, G83/1, G83/2, G59/2, G59/3, EN50438, AS4777(SAA), CEI 0-21, RD1663, IEC61727, ROHS, REACH

Efficiency Curve (SGN1800TL):



Circuit Diagram:





SGN Series

SGN1300TL / SGN1800TL / SGN2300TL / SGN2700TL / SGN3000TL

Model	SGN1300TL	SGN1800TL	SGN2300TL	SGN2700TL	SGN3000TL
Rated AC power	1000 W	1500 W	2000 W	2500 W	2800 W
Maximum AC power	1100 VA	1650 VA	2200 VA	2750 VA	3080 VA
Input					
Maximum input power	1300 W	1800 W	2300 W	2900 W	3200 W
Maximum DC input voltage	500 Vdc	500 Vdc	500 Vdc	500 Vdc	500 Vdc
MPPT operating voltage range	50 - 450 Vdc	70 - 450 Vdc	70 - 450 Vdc	70 - 450 Vdc	70 - 450 Vdc
Startup voltage	50 Vdc	60 Vdc	60 Vdc	60 Vdc	60 Vdc
Initial feeding voltage	60 Vdc	90 Vdc	90 Vdc	90 Vdc	90 Vdc
MPPT number	1	1	1	1	1
Maximum input current	12 Adc	12 Adc	12 Adc	12 Adc	12 Adc
Number of DC inputs	1	1	1	1	1
DC switch	Optional	Optional	Optional	Optional	Optional
Output					
AC voltage	220 / 230 / 240 Vac				
AC phase	Single phase				
AC voltage range	160 - 280 V (May vary as per corresponding country's grid standard)				
Frequency range	50 Hz, 60Hz / -5 Hz ... +5 Hz				
Power factor	> 0.99 , 0.8 leading...0.8 lagging controllable				
Maximum current	6.0 Aac	8.4 Aac	11.3 Aac	12.8Aac	15.7 Aac
DC current injection	< 20 mA	< 20 mA	< 20 mA	< 20 mA	< 20 mA
Current Harmonic Distorsion THDi	< 1%	< 1%	< 1%	< 1%	< 1%
System					
Maximum efficiency	>97.5%	> 97.7%	> 97.8%	> 98.0%	> 98.0%
European efficiency	>96.5%	> 96.7%	> 96.7%	> 96.9%	> 96.9%
MPPT efficiency	>99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%
Night power consumption	< 0.2 W	< 0.2 W	< 0.2 W	< 0.2 W	< 0.2 W
Topology	Transformerless				
Heat dissipation	Nature Convection				
Insulation monitoring	Yes				
DC reverse-polarity protection	Yes				
AC over current protection	Yes				
Anti-Islanding protection	Yes				
Residual current detection	Yes				
Thermal protection	Yes				
General Parameters					
Dimensions(W×H×D)	380 x 320 x 140 mm				
Weight	12 kg	13 kg	13 kg	13 kg	13 kg
Display	LCD 2 x 16 characters				
Function key	1	1	1	1	1
Data interface	RS232 / RS485/ RS422 / Ethernet / WiFi / GPRS / USB				
Ambient temperature range	-25 °C - +60 °C				
Operating altitude	< 2000m				
Protection degree	IP65				
Noise emission	< 30dB				
Warranty	Standard 5 years 10/15/20/25 years extension optional				
Certifications					
Safety/EMC	IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3, AS/NZS3100				
Grid code	NB/T32004-2013(CQC), VDE AR-N-4105, VDE 0126-1-1+A1, G83/1, G83/2, G59/2, G59/3, EN50438, AS4777(SAA), CEI 0-21, RD1663, IEC61727, UTE C15-712, MEA, PEA				