INVERTERS

Three Phase Inverters with Synergy Technology

for the 277/480V Grid for Australia

SE66.6K / SE100K

Specifically designed to work with power optimisers

- Easy two-person installation – each unit mounted separately, equipped with cables for simple connection between units
- Balance of System and labor reduction compared to using multiple smaller string inverters
- Independent operation of each unit enables higher uptime and easy serviceability
- No wasted ground area: wall/rail mounted or horizontally mounted under the modules (10˚inclination)
- Built-in module-level monitoring with Ethernet or cellular GSM
- Fixed voltage inverter for superior efficiency (98.1%) and longer strings
- Integrated Connection Unit with optional integrated DC Safety Switch – eliminates the need for external DC isolators
- Built-in RS485 Surge Protection, to better withstand lightning events

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/ Three Phase Inverter with Synergy Technology for Australia for the 277/480V Grid

SE66.6K / SE100K

	SE66.6K	SE100K	
OUTPUT			
Rated AC Power Output	66600	100000	VA
Maximum AC Power Output	66600	100000	VA
AC Output Voltage — Line to Line / Line to Neutral (Nominal)	480 / 277		Vac
AC Output Voltage — Line to Line Range; Line to Neutral Range	384 - 552 / 244-305		Vac
AC Frequency	50 ± 5		Hz
Maximum Continuous Output Current (per Phase) @Vac,nom	80	120	A
Grids Supported — Three Phase	3 / N / PE (WYE with Neutral)		V
Maximum Residual Current Injection	250 per unit[1]		mA
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes		
INPUT			
Maximum DC Power (Module STC), Inverter / Unit	90000 / 45000	135000 /45000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to GND	500		Vdc
Maximum Input Voltage DC+ to DC-	1000		Vdc
Nominal DC Input Voltage DC to GND	425		Vdc
Nominal DC Input Voltage DC+ to DC-	850		Vdc
Maximum Input Current	80	120	Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	350kΩ Sensitivity per Unit		
Maximum Inverter Efficiency	98.1		%
European Weighted Efficiency	98		%
Nighttime Power Consumption	< 12		W
ADDITIONAL FEATURES			
Supported Communication Interfaces[2]	RS485, Ethernet, ZigBee (optional), Cellular (optional), Wi-Fi (optional)		
RS485 Surge Protection	Built-in		
DC CONNECTION UNIT			
DC Disconnect	1000V / 2 x 40A		
STANDARD COMPLIANCE			
Safety	IEC-62109, AS3100		
Grid Connection Standards[3]	VDE-AR-N-4105, G59/3, AS-4777,EN 50438 , CEI-021,VDE 0126-1-1, CEI-016, BDEW		
Emissions	IEC61000-6-2, IEC61000-6-3 , IEC61000-3-11, IEC61000-3-12		
RoHS	Yes		
INSTALLATION SPECIFICATIONS			
Number of Units	2	3	
AC Output Conduit Size / Max cross section / Max PE AWG	40mm / 70mm^2 / 35mm^2	50mm / 95mm^2 / 50mm^2	
DC Output Conduit Size / Terminal Block AWG Range / Number of Strings	2x25mm/4-10mm^2/6 strings	3x25mm/4-10mm^2/9 strings	
AC Output Wire	Aluminum or Copper; L, N: Up to 70, PE: Up to 35	Aluminum or Copper; L, N: Up to 95, PE: Up to 50	mm^2
Dimensions (H x W x D)	Primary Unit: 940 x 315 x 260; Secondary Unit: 540 x 315 x 260		mm
Weight	Primary Unit: 48; Secondary Unit: 45		kg
Operating Temperature Range	-40 to +60[4]		˚C
Cooling	Fan (user replaceable)		
Noise	< 60		dBA
Protection Rating	IP65 — Outdoor and Indoor		
Bracket Mounted (Brackets Provided)			

[1] If an external RCD is required, its trip value must be ≥ 300mA per unit (≥ 600mA for SE66.6K; ≥ 900mA for SE100K)
[2] Refer to Datasheets -> Communications category on Downloads page for specifcations of optional communication options: http://www.solaredge.com/groups/support/downloads
[3] For all standards refer to Certifications category on Downloads page: http://www.solaredge.com/groups/support/downloads
[4] For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf

CE RoHS