



# SolarEdge Three Phase Inverters for the Medium Voltage Grid

SE66.6K-SE100K



INVERTERS

## Specifically designed to work with power optimizers

- 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 DC Safety Unit with DC Safety Switch and optional surge protection & DC fuses – eliminates the need for external DC isolators
- Built-in RS485 Surge Protection Device, to better withstand lightning events



# SolarEdge Three Phase Inverters for the Medium Voltage Grid SE66.6K-SE100K

	SE66.6K	SE100K	
<b>OUTPUT</b>			
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	432 - 528 / 249.3 - 304.7		Vac
AC Frequency	50/60 ± 5		Hz
Maximum Continuous Output Current (per Phase) @277V	80	120	A
Grids Supported — Three Phase	3 / N / PE (WYE with Neutral)		V
Maximum Residual Current Injection <sup>(1)</sup>	250 per unit		mA
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes		
<b>INPUT</b>			
Maximum DC Power (Module STC), Inverter / Unit	90000 / 45000	13500 / 45000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage	1000		Vdc
Nominal DC Input Voltage	850		Vdc
Maximum Input Current	80	120	Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	350kΩ Sensitivity per Unit <sup>(2)</sup>		
Maximum Inverter Efficiency	98.1		%
European Weighted Efficiency	98		%
Nighttime Power Consumption	< 12		W
<b>ADDITIONAL FEATURES</b>			
Supported Communication Interfaces <sup>(3)</sup>	RS485, Ethernet, Cellular GSM (optional)		
RS485 Surge Protection	Built-in		
<b>DC SAFETY UNIT</b>			
DC Disconnect	1000V / 2 x 40A	1000V / 3 x 40A	
DC Surge Protection	Optional, Type II, field replaceable		
DC Fuses on Plus & Minus	Optional, 30A		
<b>STANDARD COMPLIANCE<sup>(4)</sup></b>			
Safety	IEC-62109, AS3100		
Grid Connection Standards <sup>(5)</sup>	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		
<b>INSTALLATION SPECIFICATIONS</b>			
Number of units	2	3	
AC Output Cable	Cable gland — diameter 22-32; PE gland diameter 10-16	Cable gland — diameter 20-38; PE gland diameter 10-16	mm
DC Input <sup>(6)</sup>	6 strings, 4-10mm <sup>2</sup> DC wire, gland outer diameter 5-10mm	9 strings, 4-10mm <sup>2</sup> DC wire, gland outer diameter 5-10mm	
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 <sup>2</sup>
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 <sup>(7)</sup>		°C
Cooling	Fan (user replaceable)		
Noise	< 60		dBA
Protection Rating	IP65 — Outdoor and Indoor		
Bracket Mounted (Brackets Provided)			

<sup>(1)</sup> If an external RCD is required, its trip value must be ≥ 300mA per unit (≥ 600mA for SE66.6K; ≥ 900mA for SE100K)

<sup>(2)</sup> Where permitted by local regulations

<sup>(3)</sup> Refer to Datasheets -> Communications category on Downloads page for specifications of optional communication options: <http://www.solaredge.com/groups/support/downloads>

<sup>(4)</sup> Pending

<sup>(5)</sup> For all standards refer to Certifications category on Downloads page: <http://www.solaredge.com/groups/support/downloads>

<sup>(6)</sup> Single input option per unit (up to 25mm<sup>2</sup>) available

<sup>(7)</sup> For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

