



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



SolarEdge Three Phase Inverters for the Medium Voltage 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	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
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes		
INPUT			
Maximum DC Power (Module STC)	90000	135000	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 ⁽¹⁾		
Maximum Inverter Efficiency	98.1		%
European Weighted Efficiency	98		%
Nighttime Power Consumption	< 12		W
ADDITIONAL FEATURES			
Supported Communication Interfaces ⁽²⁾	RS485, Ethernet, Cellular GSM (optional)		
DC SAFETY UNIT			
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		
STANDARD COMPLIANCE⁽³⁾			
Safety	IEC-62109, AS3100		
Grid Connection Standards ⁽⁴⁾	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 Cable	Cable gland — diameter 22-32; PE gland diameter 10-16	Cable gland — diameter 20-38; PE gland diameter 10-16	mm
DC Input ⁽⁵⁾	6 strings, 4-10mm ² DC wire, gland outer diameter 5-10mm	9 strings, 4-10mm ² DC wire, gland outer diameter 5-10mm	
AC Output Wire	Up to 50, Aluminum or Copper	Up to 95, Aluminum or Copper	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	-20 to +60 ⁽⁶⁾ (M40 version -40 to +60)		°C
Cooling	Fan (user replaceable)		
Noise	< 60		dB(A)
Protection Rating	IP65 — Outdoor and Indoor		
Bracket Mounted (Brackets Provided)			

⁽¹⁾ Where permitted by local regulations

⁽²⁾ Refer to Datasheets -> Communications category on Downloads page for specifications of optional communication options: <http://www.solaredge.com/groups/support/downloads>

⁽³⁾ Pending

⁽⁴⁾ For all standards refer to Certifications category on Downloads page: <http://www.solaredge.com/groups/support/downloads>

⁽⁵⁾ Single input option per unit (up to 25mm²) available

⁽⁶⁾ De-rating from 50°C

