

Three Phase Inverters

For Delta Grids (Norway, Taiwan & Philippines)

SE12.5K - SE17K

INVERTERS



Specifically designed to work with power optimizers

- /// Superior efficiency (98%)
- /// Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- /// Small, lightest in its class, and easy to install
- /// Built-in module-level monitoring
- /// Internet connection through Ethernet or Wireless
- /// IP65 – Outdoor and indoor installation
- /// Fixed voltage inverter, DC/AC conversion only
- /// Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- /// Optional DC surge protection and DC fuses
- /// Advanced safety features - integrated arc fault protection and optional rapid shutdown fuses

/ Three Phase Inverters for Delta Grids

(Norway, Taiwan & Philippines)

SE12.5K – SE17K

Applicable to Inverters with					
SEXXX-XXXXBXX4					
Part Number	SE12.5K	SE15K	SE16K	SE17K	
OUTPUT					
Rated AC Power Output	7200	8700	9200	10000	VA
Maximum AC Power Output	7200	8700	9200	10000	VA
AC Output Voltage - Line to Line / Line to PE	220 / 127 ; 230 / 133				Vac
AC Output Voltage - Line to Line Range	184 - 264.5				Vac
AC Frequency	50/60 ± 5				Hz
Maximum Continuous Output Current (per Phase)	20	23	25.5	26	A
Residual Current Detector / Residual Current Step Detector	300 / 30				mA
Grids Supported - Three Phase	3 Lines / PE (Delta; corner grounding not supported)				
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
THD	≤ 3				%
INPUT					
Maximum DC Power (Module STC)	9720	11745	12420	13500	%
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage	600				Vdc
Operational Voltage Range	370 - 600				Vdc
Maximum Input Current	19	22.5	24	26	Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	700kΩ Sensitivity				
Maximum Inverter Efficiency	98				%
European Weighted Efficiency	97.7	97.6	97.7		%
Nighttime Power Consumption	< 2.5				W
ADDITIONAL FEATURES					
Supported Communication Interfaces ⁽¹⁾	RS485, Ethernet, Wi-Fi (requires antenna ⁽²⁾), ZigBee (optional), Cellular (optional)				
Inverter Comisioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection				
Rapid Shutdown	Optional ⁽⁴⁾ (Automatic upon AC Grid Disconnect)				
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)				
Smart Energy Management	Export limitation				
RS485 Surge Protection	Optional ⁽⁵⁾				
DC SAFETY UNIT (OPTIONAL)					
2-pole Disconnection	N/A				
DC Surge Protection	N/A				
DC Fuses on Plus & Minus	N/A				
Compliance	N/A				
STANDARD COMPLIANCE					
Safety	IEC-62103 (EN50178), IEC-62109				
Grid Connection Standards ⁽⁶⁾	C10/11, EN50438				
Electromagnetic Compatibility (EMC)	EN/IEC 61000-6-1, EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN/IEC 61000-6-4, EN 55011, FCC Part 15, EN/IEC 61000-3-2, EN/IEC 61000-3-3, EN/IEC 61000-3-11, EN/IEC 61000-3-12				
RoHS	Yes				
INSTALLATION SPECIFICATIONS					
AC Output	Cable Gland - diameter 15 - 21				mm
DC Input	2 MC4 pairs				
DC Input with Safety Unit	N/A				mm
	N/A				mm ²
Dimensions (H x W x D)	540 x 315 x 260				mm
Dimensions with Safety Unit (H x W x D)	N/A				mm
Weight	30.7				kg
Weight with Safety Unit	N/A				kg
Operating Temperature Range	-40 to +60 ⁽⁷⁾				°C
Cooling	Fan (user replaceable)				
Noise	< 50				dBA
Protection Rating	IP65 - Outdoor and Indoor				
Mounting	Bracket Provided				

⁽¹⁾ Where permitted by local regulations

⁽²⁾ Refer to Datasheets -> Communications category in Downloads page for specifications of optional communication options: <https://www.solaredge.com/downloads/#/>

⁽³⁾ Wi-Fi connectivity requires an external antenna. For more information refer to: <https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf>

⁽⁴⁾ Inverter with rapid shutdown part number: SExxK-RWRxxxxx; available for SE25K and SE27.6K

⁽⁵⁾ Provided with the inverter in India only. For other countries an SPD plug-in can be purchased

Refer to: https://www.solaredge.com/sites/default/files/se_spd_plug_in_for_rs485_3ph_setapp_ds.pdf

⁽⁶⁾ For all standards refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

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