# SolarEdge Home Hub Inverter Three Phase, for Europe

SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48



#### Three phase inverter for storage and backup\* applications

- The ultimate home energy manager in charge of PV production, battery storage, backup operation during a power outage\*, and smart energy devices
- Suitable for storage application of residential and small-scale commercial installations
- More energy using DC coupled solution architecture that stores PV power directly to the battery without AC conversion losses
- Quick and easy inverter installation and commissioning directly from a smartphone using the SolarEdge SetApp
- Designed to eliminate high voltage during installation, maintenance or firefighting for enhanced safety
- Enables module-level monitoring and full visibility of battery status, PV production, and self-consumption data

<sup>\*</sup> Backup applications are available for residential installations only and are subject to local regulations. Additional components and a firmware upgrade may be required. For more information regarding commercial deployments where backup power is not supported, please refer to <u>this application</u> <u>note</u>.



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#### SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48

	SE5K-RWB48	SE8K-RWB48	SE10K-RWB48	UNITS
OUTPUT – AC ON GRID				
Rated AC Power Output (Total/Per Phase)	5000 / 1667	8000 / 2667	10000 / 3333	VA
Maximum AC Power Output (Total/Per Phase)	5000 / 1667	8000 / 2667	10000 / 3333	VA
AC Output Voltage – Line to Line / Line to Neutral (Nominal)	L	380/220; 400/230		Vac
AC Output Voltage – Line to Neutral (Range)	184 – 264.5		Vac	
AC Frequency	50/60 ± 5		Hz	
Maximum Continuous Output Current (per phase)	8	13	16	A
Fault Current Protection per Phase (120ms)	11	17.5	22	А
Residual Current Detector / Residual Current Step Detector	300/30		mA	
Grids Supported	3 / N / PE Three Phase (WYE with Neutral)			
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes			
OUTPUT – AC BACKUP <sup>(1)</sup>				
Maximum AC Power Output (Total/Per Phase)	5000/1667	8000/2667	10000/3333	VA
AC Output Voltage – Line to Line / Line to Neutral (Nominal)		380/220; 400/230		Vac
AC Output Voltage – Line to Neutral Range	184 - 264.5			Vac
AC Frequency	50/60 ± 5		Hz	
Maximum Continuous Output Current (per phase)	8	13	16	A
Fault Current Protection per Phase (120ms)	11	17.5	22	A
Residual Current Detector / Residual Current Step Detector	300/30		mA	
Grids Supported	3 / N / PE Three Phase (WYE with Neutral)			
Transformer-less, Ungrounded	Yes			
Utility Monitoring, Ensure Safe Disconnection from Utility Grid in Backup Operation <sup>(1)</sup> , Configurable Power Factor, Country Configurable Thresholds	Yes			
Automatic Switchover Time		≤ 6		Sec
Max Allowed Imbalanced Between Phases	1.66	2.66	3.33	Kw
INPUT PV				
Maximum DC Power (Module STC)	10,000	16,000	20,000	W
Input Voltage Range		750 – 900		Vdc
Maximum Input Current	13.3	17.3	20	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	700 kΩ Sensitivity			
INPUT/OUTPUT BATTERY				
Supported Battery Types	SolarEdge Hor	ne Battery BAT-05K48 (1 – 5 b	attery modules)	
Maximum Charge/Discharge Power	5000			W
Input Voltage Range	40 - 62		Vdc	
Maximum Continuous Input/Output Current	125		Adc	
Battery to Inverter Communication	CAN			
PEAK EFFICIENCY				1
PV to Grid		98		%
PV to Battery DC	98.4		%	
Battery DC to Grid	98.4 96.1		%	
European Weighted Efficiency	97.3 97.6		%	
	5.10	97	.0	/0
ADDITIONAL FEATURES Supported Communication Interfaces		RS485, Ethernet, SolarEdge Ho		

(1) Backup applications are available for residential installations only and are subject to local regulations. Additional components and a firmware upgrade may be required. For more information regarding commercial deployments where backup power is not supported, please refer to <u>this application note</u>.

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### Three Phase, for Europe

#### SE5K-RWB48 / SE8K-RWB48 / SE10K-RWB48

	SE5K-RWB48	SE8K-RWB48	SE10K-RWB48	UNITS
STANDARD COMPLIANCE				
Safety	IEC 62109			
Grid Connection Standards <sup>(2)</sup>	VDE-AR-N 4105, Tor Erzeuger Typ A, EN 50549-1, CEI 0-21, G98 Type A, G98 NI Type A, RD1699 / RD413 / NTS, VDE-V 0126-1-1, VFR 2019, C10/11, EN 50438, VDE 2510-2			
Emissions	IEC 61000-6-2, IEC 61000-6-3, IEC 61000-3-11, IEC 61000-3-12, EN 55011			
RoHS	Yes			
INSTALLATION SPECIFICATIONS				
AC Output – Cable Gland Diameter	15 – 21			mm
AC Output – Cable Cross Section	2.5 – 16			mm <sup>2</sup>
Battery DC – Cable Gland Outer Diameter	2 x 11 – 16.5			mm
Battery DC – Cable Cross Section	35			mm <sup>2</sup>
PV DC Input	2 x MC4 pair			
Dimensions (H x W x D)	907 x 317 x 192			mm
Weight	37		kg	
Operating Temperature Range	-40 to +60		°C	
Cooling	Fans			
Noise	< 50		dBA	
Protection Rating	IP65 – outdoor and indoor			
Mounting	Brackets provided			
External RCD	Unless a different value is required by the local electric code, SolarEdge recommends a type-A RCD with a value of 100mA, and a minimum Residual Non-Tripping Current (I <sub>Ano</sub> ) value of 70mA.			

(2) For all standards, see the Certifications category in the Knowledge Center.

#### SOLAREDGE HOME HUB INVERTER – ACCESSORIES (PURCHASED SEPARATELY)

**OPTIONAL COMMUNICATION INTERFACES** 

Wi-Fi Cellular SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.



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