

# Single Phase Inverter, Power Optimizer with Compact Technology

Inverters: SE1000M, SE1500M, SE2000M  
Power Optimizer: M2640



**SINGLE PHASE INVERTERS,  
POWER OPTIMIZER**

## Cost-effective solution for residential systems of 4-8 modules

- Each of the four power optimizer inputs supports one or two 60-cell modules, or one 72/96-cell modules
- Suitable for homes with limited roof space, social housing projects, or for meeting minimum sustainability requirements
- Extremely compact, lightweight, and easy to install
- IP65 rated inverter — suitable for indoor or outdoor installation
- Power optimizer and inverter designed to work exclusively with each other and are ordered with a single part number and supplied in a single box
- Optional communication option for maximum cost effectiveness

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## INVERTER SPECIFICATIONS:

	SE1000M	SE1500M	SE2000M	UNIT
<b>OUTPUT</b>				
Maximum AC Power Output	1000	1500	2000	VA
AC Output Voltage (nominal)	220 / 230			Vac
AC Output Voltage Range	184 - 264.5			Vac
AC Frequency (nominal)	50 / 60 ± 5			Hz
Maximum Continuous Output Current	5	7	9.5	A
<b>INPUT</b>				
Maximum DC Power	1350	2025	2640	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage	500			Vdc
Operating Voltage	75 - 480			Vdc
Maximum Input Current	11			Adc
Maximum Inverter Efficiency	97			%
European Weighted Efficiency	95.7	96.5	97	%
<b>ADDITIONAL FEATURES</b>				
Supported Communication Interfaces	Basic: No Communication Interfaces			
	Extended: RS485 Interface, communication to SolarEdge monitoring platform via built-in Ethernet or Wi-Fi <sup>(1)</sup> connectivity, or additional options purchased separately such as ZigBee or GSM plug-ins			
Smart Energy Management	Basic: No Smart Energy Management			
	Extended: Export Limitation, Home Energy Management			
<b>STANDARD COMPLIANCE</b>				
Safety	IEC-62103 (EN50178), IEC-62109			
Grid Connection Standards	VDE-AR-N-4105, VDE 0126-1-1, AS-4777, RD-1663, DK5940			
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC part 15 class B			
RoHS	Yes			
<b>INSTALLATION SPECIFICATIONS</b>				
Dimensions (H x W x D)	340 x 239 x 127			mm
Noise	< 25			dBA
Weight	6			kg
Cooling	Natural Convection			
Operating Temperature Range	-40 to +60 <sup>(2)</sup>			°C
Protection Rating	IP65 - Outdoor and Indoor			

(1) 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>

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

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## POWER OPTIMIZER SPECIFICATIONS:

M2640 (For 4-8 60-cell modules or 4 72-cell / 96-cell modules)		UNIT
<b>INPUT</b>		
Number of Inputs	4	
Number of MPP Trackers	4 (one per input)	
Rated DC Power per Input <sup>(1)</sup>	660	W
Absolute Maximum Input Voltage per Input (Voc at lowest temperature)	96	Vdc
MPPT per Input Operating Range	12.5 - 80	Vdc
Maximum Short Circuit Current per Input (Isc)	10.5	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)</b>		
Maximum Output Current	10.5	Adc
Maximum Output Voltage	340	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)</b>		
Safety Output Voltage per Power Optimizer	10 ± 1	Vdc
<b>INSTALLATION SPECIFICATIONS</b>		
Maximum Allowed System Voltage	600	Vdc
Dimensions (H x W x D)	152 x 211 x 60	mm
Weight (including cables)	1.5	kg
Input Connector	4 x MC4 Pairs	
Output Connector	1 x MC4 Pair	
Operating Temperature Range	-40 to +85	°C
Protection Rating	IP68	

(1) Rated STC power of the module. Module of up to +5% power tolerance allowed.

	SE1000M	SE1500M	SE2000M	UNIT
<b>PV SYSTEM DESIGN</b>				
Number of M2640 per Inverter		1		
Maximum DC System Power	1350	2025	2640	W <sub>DC</sub>

