



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

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



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Inverters: SE1000M, SE1500M, SE2000M; Power Optimizer: M2640

INVERTER SPECIFICATIONS:

	SE1000M	SE1500M	SE2000M	
OUTPUT				
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 ± 5		Hz
Maximum Continuous Output Current	5	7	9.5	A
INPUT				
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	%
ADDITIONAL FEATURES				
Supported Communication Interfaces	Basic: No Communication Interfaces Extended: RS485 Interface, communication to SolarEdge monitoring platform via built-in Ethernet or additional connectivity options purchased separately such as Wi-Fi, ZigBee®, and GSM plug-ins			
Smart Energy Management	Basic: No Smart Energy Management Extended: Export Limitation, Home Energy Management			
STANDARD COMPLIANCE				
Safety	IEC-62103 (EN50178), IEC-62109			Vdc
Grid Connection Standards	VDE-AR-N-4105, VDE 0126-1-1, AS-4777, RD-1663, DK5940			Vdc
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC part 15 class B			Vdc
RoHS	Yes			Vdc
INSTALLATION SPECIFICATIONS				
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 ⁽¹⁾			°C
Protection Rating	IP65 - Outdoor and Indoor			

⁽¹⁾ For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

POWER OPTIMIZER SPECIFICATIONS:

INPUT	M2640 (for 4-8 60-cell modules)		
Number of Inputs	4		
Number of MPP Trackers	4 (1 per Input)		
Rated DC Power per Input ⁽¹⁾	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)	13.1		Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.8		%
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)			
Maximum Output Current	10.5		Adc
Maximum Output Voltage	340		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)			
Safety Output Voltage per Power Optimizer	10 ± 1		Vdc
INSTALLATION SPECIFICATIONS			
Maximum Allowed System Voltage	600		Vdc
Dimensions (W x L x H)	145 x 211 x 56		mm
Weight (including cables)	1.5		kg
Input Connector	4 x MC4 Pairs		
Output Connector	MC4 Pairs		
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.

PV SYSTEM DESIGN	SE1000M	SE1500M	SE2000M	
Number of M2640 per Inverter		1		
Maximum DC System Power	1350	2025	2640	Woc

