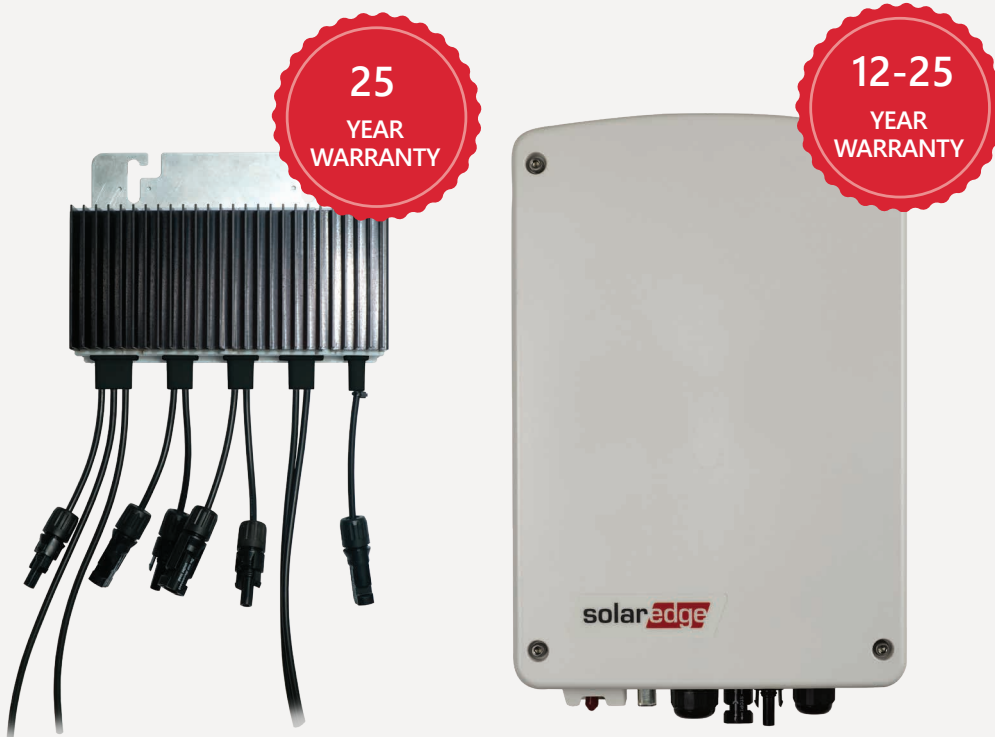


---

# 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

# / Single Phase Inverter, Power Optimizer with Compact Technology

Inverters: SE1000M, SE1500M, SE2000M

Power Optimizer: M2640

## 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>

# / Single Phase Inverter, Power Optimizer with Compact Technology

Inverters: SE1000M, SE1500M, SE2000M

Power Optimizer: M2640

## 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> |

