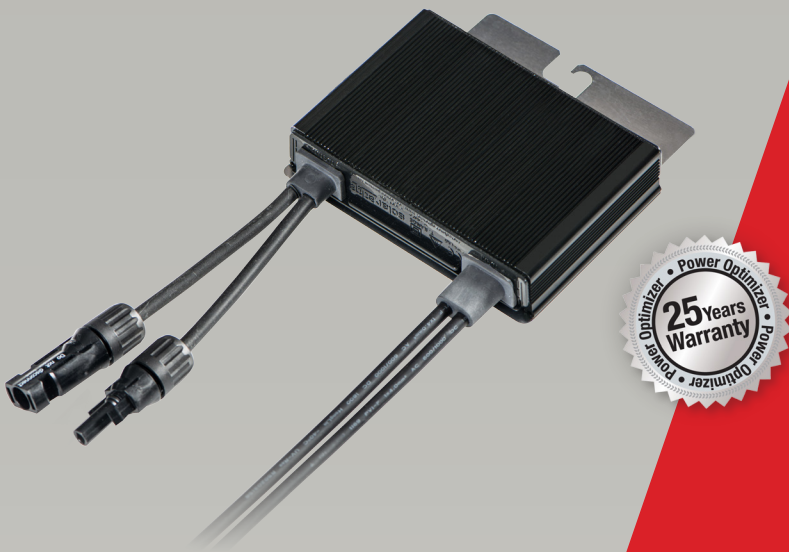




# SolarEdge Power Optimizer

for Australia  
Module Add-On

P300 / P350 / P404 / P405 / P500



POWER OPTIMIZER

## PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety



# SolarEdge Power Optimizer for Australia

## Module Add-On P300 / P350 / P404 / P405 / P500

|   | P300<br>(for 60-cell<br>modules)               | P350<br>(for high-power 60-<br>cell and for<br>72-cell modules) | P500<br>(for 96-cell<br>modules)    | P404<br>(for 60-cell<br>and 72-cell,<br>short strings) | P405<br>(for thin film<br>modules)     |         |
|---|--|---|-------------------------------------|--|--|---------|
| <b>INPUT</b>  |  |   |                                     |  |  |         |
| Rated Input DC Power <sup>(1)</sup>   | 300  | 350   | 500                                 | 405  | 405                                    | W       |
| Absolute Maximum Input Voltage<br>(Voc at lowest temperature)   | 48   | 60  | 80                                  | 80   | 125                                    | Vdc     |
| MPPT Operating Range  | 8 - 48   | 8 - 60  | 8 - 80                              | 12.5 - 80  | 12.5 - 105                             | Vdc     |
| Maximum Continuous Input Current (Isc)  | 10   | 11  |                                     | 10.1   |  | Adc     |
| Maximum Efficiency  |  |   | 99.5                                |  |  | %       |
| Weighted Efficiency   |  |   | 98.8                                |  |  | %       |
| Overvoltage Category  |  |   | II                                  |  |  |         |
| <b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)</b>                     |  |   |                                     |  |  |         |
| Maximum Output Current  |  |   | 15                                  |  |  | Adc     |
| Maximum Output Voltage  |  | 60  |                                     | 85   |  | Vdc     |
| <b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)</b> |  |   |                                     |  |  |         |
| Safety Output Voltage per Power Optimizer   |  |   | 1                                   |  |  | Vdc     |
| <b>STANDARD COMPLIANCE</b>  |  |   |                                     |  |  |         |
| EMC   | FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3 |   |                                     |  |  |         |
| Safety  | IEC62109-1 (class II safety), UL1741           |   |                                     |  |  |         |
| RoHS  | Yes  |   |                                     |  |  |         |
| Fire Safety   | VDE-AR-E 2100-712:2013-05                      |   |                                     |  |  |         |
| <b>INSTALLATION SPECIFICATIONS</b>  |  |   |                                     |  |  |         |
| Maximum Allowed System Voltage  | 1000   |   |                                     |  |  | Vdc     |
| Dimensions (W x L x H)  | 128 x 152 x 27.5 / 5 x 5.97 x 1.08             |   | 128 x 152 x 35 /<br>5 x 5.97 x 1.37 | 128 x 152 x 43 /<br>5 x 5.97 x 1.69                    | 128 x 152 x<br>50 / 5 x 5.97 x<br>1.96 | mm / in |
| Weight (including cables)   | 630 / 1.4                                      | 655 / 1.5   | 750 / 1.7                           | 775 / 1.7  | 845 / 1.9                              | gr / lb |
| Input Connector   | MC4 <sup>(2)</sup>                             |   |                                     |  | Single or Dual<br>MC4 <sup>(3)</sup>   |         |
| Output Connector  | MC4  |   |                                     |  |  |         |
| Output Wire Length  | 0.95 / 3.0                                     | 1.2 / 3.9   | 1.2 / 3.9                           |  |  | m / ft  |
| Operating Temperature Range   | -40 - +85 / -40 - +185                         |   |                                     |  |  | °C / °F |
| Protection Rating   | IP68 / NEMA6P                                  |   |                                     |  |  |         |
| Relative Humidity   | 0 - 100  |   |                                     |  |  | %       |

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

<sup>(2)</sup> For other connector types please contact SolarEdge.

<sup>(3)</sup> Dual version for parallel connection of 2 thin film modules; P/N: P405-SRMDMRM.

| PV SYSTEM DESIGN USING A<br>SOLAREEDGE INVERTER <sup>(4)</sup> |  | SINGLE PHASE<br>HD-WAVE                     | SINGLE PHASE                   | THREE PHASE<br>RESIDENTIAL<br>E-SERIES <sup>(5)</sup> | THREE PHASE<br>COMMERCIAL |   |
|--|--|---|--------------------------------|---|---------------------------|---|
|  |  | Minimum String Length<br>(Power Optimizers) | P300, P350, P500<br>P404, P405 | 8<br>6  |                           |   |
| Maximum String Length (Power Optimizers)                       |  | 25  |                                | 15 per array  | 50                        |   |
| Maximum Power per String                                       |  | 5700  |                                | 5250  | 11250                     | W |
| Parallel Strings of Different Lengths or Orientations          |  |   |                                | Yes   |                           |   |
| Notes  |  |   |                                | Connect 2 arrays                                      |                           |   |

<sup>(4)</sup> It is not allowed to mix P404/P405 with P300/P350/P500 in one string. With the E-Series inverters, use either P404/P405 optimizers or P300/P350/P500 optimizers.

<sup>(5)</sup> Optimizers must be connected in two separate arrays. For complete design guidelines for the E-Series inverters refer to: [http://www.solaredge.com/sites/default/files/se\\_inverter\\_installation\\_guide\\_e\\_series\\_addendum\\_aus.pdf](http://www.solaredge.com/sites/default/files/se_inverter_installation_guide_e_series_addendum_aus.pdf)

