



# SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P500



POWER OPTIMIZER

## PV power optimization at the module-level

- 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 Module Add-On

P300 / P350 / P500

|                                                                                    | P300<br>(for 60-cell PV modules)               | P350<br>(for 72-cell PV modules) | P500<br>(for 96-cell PV modules) |         |
|------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------|----------------------------------|---------|
| INPUT                                                                              |                                                |                                  |                                  |         |
| Rated Input DC Power <sup>(1)</sup>                                                | 300                                            | 350                              | 500                              | W       |
| Absolute Maximum Input Voltage<br>(Voc at lowest temperature)                      | 48                                             | 60                               | 80                               | Vdc     |
| MPPT Operating Range                                                               | 8 - 48                                         | 8 - 60                           | 8 - 80                           | Vdc     |
| Maximum Continuous Input Current (Isc)                                             |                                                | 10                               |                                  | Adc     |
| Maximum Efficiency                                                                 |                                                | 99.5                             |                                  | %       |
| Weighted Efficiency                                                                |                                                | 98.8                             |                                  | %       |
| Overvoltage Category                                                               |                                                | II                               |                                  |         |
| OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)          |                                                |                                  |                                  |         |
| Maximum Output Current                                                             |                                                | 15                               |                                  | Adc     |
| Maximum Output Voltage                                                             |                                                | 60                               |                                  | Vdc     |
| OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF) |                                                |                                  |                                  |         |
| Safety Output Voltage per Power Optimizer                                          |                                                | 1                                |                                  | Vdc     |
| STANDARD COMPLIANCE                                                                |                                                |                                  |                                  |         |
| 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                      |                                  |                                  |         |
| INSTALLATION SPECIFICATIONS                                                        |                                                |                                  |                                  |         |
| Maximum Allowed System Voltage                                                     | 1000                                           |                                  |                                  | Vdc     |
| Dimensions (W x L x H)                                                             | 141 x 212 x 40.5 / 5.55 x 8.34 x 1.59          |                                  |                                  | mm / in |
| Weight (including cables)                                                          | 950 / 2.1                                      |                                  |                                  | gr / lb |
| Input Connector                                                                    | MC4 / Amphenol / Tyco / H+S                    |                                  |                                  |         |
| Output Connector                                                                   | MC4                                            |                                  |                                  |         |
| Output Wire Length                                                                 | 0.95 / 3.0                                     | 0.95 / 3.0 or 1.2 / 3.9          | 1.2 / 3.9                        | m / ft  |
| Operating Temperature Range                                                        | -40 - +85 / -40 - +185                         |                                  |                                  | °C / °F |
| Protection Rating                                                                  | IP65 / NEMA4                                   |                                  |                                  |         |
| Relative Humidity                                                                  | 0 - 100                                        |                                  |                                  | %       |

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

| PV SYSTEM DESIGN USING A<br>SOLAREEDGE INVERTER          | SINGLE PHASE | THREE PHASE |   |
|----------------------------------------------------------|--------------|-------------|---|
| Minimum String Length (Power Optimizers)                 | 8            | 16          |   |
| Maximum String Length (Power Optimizers)                 | 25           | 50          |   |
| Maximum Power per String                                 | 5250         | 11250       | W |
| Parallel Strings of Different Lengths or<br>Orientations | Yes          |             |   |

