# solar<span>edge</span>

## SolarEdge Power Optimizer
### Module Add-On for Commercial Installations
P600 / P700 / P800p / P800s

**25 Years Warranty** · Power Optimizer · Power Optimizer · Power Optimizer · Power Optimizer

**PV power optimization at the module-level**
**The most cost effective solution for commercial and large field installations**

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in series or in parallel

# solaredge

## SolarEdge Power Optimizer Module Add-On For
### Commercial Installations   P600 / P700 / P800p / P800s

|  | P600 (for 2 x 60-cell PV modules) | P700 (for 2 x 72-cell PV modules) | P800p (for parallel connection of 2x 96-cell 5'' PV modules) | P800s (for series connection of 2x high power or bi-facial modules) |  |
|---|---|---|---|---|---|
| **INPUT** | | | | | |
| Rated Input DC Power[1] | 600 | 700 | 800 | | W |
| Absolute Maximum Input Voltage (Voc at lowest temperature) | 96 | 125 | 83 | 120 | Vdc |
| MPPT Operating Range | 12.5 - 80 | 12.5 - 105 | 12.5 - 83 | 12.5 - 105 | Vdc |
| Maximum Short Circuit Current (Isc) | 10.1 | | 14 | 12.5 | Adc |
| Maximum Efficiency | 99.5 | | | | % |
| Weighted Efficiency | 98.6 | | | | % |
| Overvoltage Category | II | | | | |
| **OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)** | | | | | |
| Maximum Output Current | 15 | | 18 | | Adc |
| Maximum Output Voltage | 85 | | | | Vdc |
| **OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE 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) | | | | |
| RoHS | Yes | | | | |
| Fire Safety | VDE-AR-E 2100-712:2013-05 | | | | |
| **INSTALLATION SPECIFICATIONS** | | | | | |
| Compatible SolarEdge Inverters | Three phase inverters SE15K & larger | Three phase inverters SE16K & larger | | | |
| Maximum Allowed System Voltage | 1000 | | | | Vdc |
| Dimensions (W x L x H) | 128 x 152 x 43 / 5 x 5.97 x 1.69 | 128 x 152 x 50 / 5 x 5.97 x 1.93 | 128 x 152 x 59 / 5 x 5.97 x 2.32 | | mm / in |
| Weight (including cables) | 834 / 1.8 | 933 / 2.1 | 1019 / 2.2 | 1064/2.3 | gr / lb |
| Input Connector[2] | MC4 | | MC4 (Single or Dual input)[6] | MC4 | |
| Output Connector | MC4 | | | | |
| Output Wire Length | 1.2 / 3.9 (portrait orientation) or 1.8 / 5.9 (landscape orientation) | 1.2 / 3.9 (portrait orientation) or 2.1 / 6.9 (landscape orientation) | 1.2 / 3.9 (portrait orientation) or 1.8 / 5.9 (landscape orientation)[4] | 1.2 / 3.9 (portrait orientation) or 2.1 / 6.9 (landscape orientation) | m / ft |
| Operating Temperature Range[3] | -40 - +85 / -40 - +185 | | | | ˚C / ˚F |
| Protection Rating | IP68 / NEMA6P | | | | |
| Relative Humidity | 0 - 100 | | | | % |

[1] Rated STC power of the module. Module of up to +5% power tolerance allowed.
[2] For other connector types please contact SolarEdge.
[3] For ambient temperature above +70˚C / +158˚F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Application Note for more details.
[4] Single input version has 1.8m output wires.

| PV SYSTEM DESIGN USING A SOLAREDGE INVERTER[5][6] | | THREE PHASE SE15K AND LARGER | THREE PHASE SE16K AND LARGER | | THREE PHASE SE33.3K | | |
|---|---|---|---|---|---|---|---|
| Compatible Power Optimizers | | P600 | P600, P700 | P800 | P600, P700 | P800 | |
| Minimum String Length | Power Optimizers | 13 | 12 | | 13 | | |
| | PV Modules | 26 | 24 | | 26 | | |
| Maximum String Length | Power Optimizers | 30 | | | | | |
| | PV Modules | 60 | | | | | |
| Maximum Power per String | | 11250[7] | 13500 | | 12750[8] | 15300 | W |
| Parallel Strings of Different Lengths or Orientations | | Yes | | | | | |

[5] P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700/P800 with P300/P350/P500/P404/P405 in one string.
[6] In a case of odd number of PV modules in one string it is allowed to install one P600/P700 /P800 power optimizer connected to one PV module. When connecting a single module to the P800p the single input version should be used.
[7] For SE27.6K: It is allowed to install up to 13,500W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W; inverter max DC power: 37,250W.
[8] For SE33.3K: It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W; inverter max DC power: 45,000W.