



SolarEdge Power Optimizer

Module Add-On for Commercial Installations

P600 / P700



POWER OPTIMIZER

PV power optimization at the module-level

The most cost effective solution for commercial and large field installations

- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System costs reduction; 50% less cables, fuses and combiner boxes
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in series



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

| | P600 (for 2 x 60-cell PV modules) | P700 (for 2 x 72-cell PV modules) | |
|---|--|--|---------|
| INPUT | | | |
| Rated Input DC Power ⁽¹⁾ | 600 | 700 | W |
| Absolute Maximum Input Voltage (Voc at lowest temperature) | 96 | 125 | Vdc |
| MPPT Operating Range | 12.5 - 80 | 12.5 - 105 | Vdc |
| Maximum Continuous Input Current (Isc) | | 10 | Adc |
| Maximum Efficiency | | 99.5 | % |
| Weighted Efficiency | | 98.6 | % |
| Overvoltage Category | | II | |
| OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER) | | | |
| Maximum Output Current | | 15 | Adc |
| Maximum Output Voltage | | 85 | 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) | | |
| 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) | 141 x 212 x 40.5 / 5.55 x 8.34 x 1.59 | | mm / in |
| Weight (including cables) | 1100 / 2.4 | | gr / lb |
| Input Connector | MC4 / Amphenol / Tyco / H+S | | |
| 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) | m / ft |
| Operating Temperature Range ⁽²⁾ | -40 - +85 / -40 - +185 | | °C / °F |
| Protection Rating | IP65 / NEMA4 | | |
| Relative Humidity | 0 - 100 | | % |

⁽¹⁾ Rated combined STC power of 2 modules connected in series. Module of up to +5% power tolerance allowed.

⁽²⁾ 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.

| PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽³⁾⁽⁴⁾ | | THREE PHASE SE15K AND LARGER | THREE PHASE SE16K AND LARGER | |
|---|------------------|---------------------------------|---------------------------------|---|
| | | P600 | P600 & P700 | |
| Compatible Power Optimizers | | | | |
| Minimum String Length | Power Optimizers | | 13 | |
| | PV Modules | | 26 | |
| Maximum String Length | Power Optimizers | | 30 | |
| | PV Modules | | 60 | |
| Maximum Power per String | | 11250 | | W |
| Parallel Strings of Different Lengths or Orientations | | Yes | | |

⁽³⁾ P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700 with P300/P350/P500 in one string.

⁽⁴⁾ In a case of odd number of PV Modules in one string it is allowed to install one P600/P700 power optimizer connected to one PV Module.

