

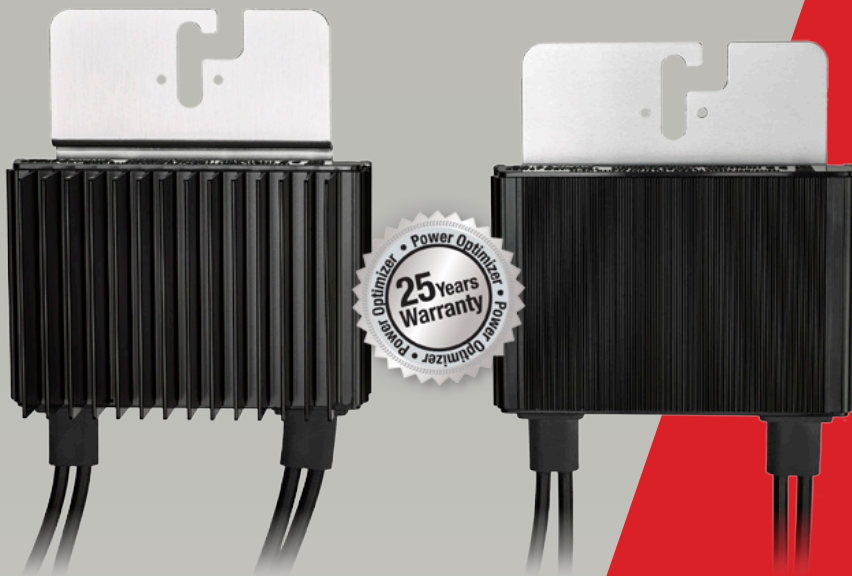


SolarEdge Power Optimiser

for Australia
Module Add-On

P300 / P370 / P404 / P405 / P500 / P505

POWER OPTIMISER



PV power optimisation 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



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Module Add-On P300 / P370 / P404 / P405 / P500 / P505

| Optimiser model (typical module compatibility) | P300 (for 60-cell modules) | P370 (for high-power 60 and 72-cell modules) | P500 (for 96-cell modules) | P404 (for 60-cell and 72-cell, short strings) | P405 (for thin film modules) | P505 (for higher current modules) | |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------|----------------------------------|--------------------------------------------------------|------------------------------------|--------------------------------------------|-----|
| INPUT | | | | | | | |
| Rated Input DC Power ⁽¹⁾ | 300 | 370 ⁽²⁾ | 500 ⁽²⁾ | 405 ⁽²⁾ | 405 ⁽²⁾ | 505 ⁽²⁾ | W |
| Absolute Maximum Input Voltage (Voc at lowest temperature) | 48 | 60 | 80 | 80 | 125 | 83 | Vdc |
| MPPT Operating Range | 8 - 48 | 8 - 60 | 8 - 80 | 12.5 - 80 | 12.5 - 105 | 12.5-83 | Vdc |
| Maximum Short Circuit Current (Isc) | 11 | | 10.1 | | 14 | | Adc |
| Maximum Efficiency | | | | 99.5 | | | % |
| Weighted Efficiency | | | | 98.8 | | | % |
| Oversoltage Category | | | | II | | | |
| OUTPUT DURING OPERATION (POWER OPTIMISER CONNECTED TO OPERATING SOLAREEDGE INVERTER) | | | | | | | |
| Maximum Output Current | | | | 15 | | | Adc |
| Maximum Output Voltage | 60 | | | 85 | | | Vdc |
| OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF) | | | | | | | |
| Safety Output Voltage per Power Optimiser | | | | 1 ± 0.1 | | | 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) | 128 x 152 x 28 | | 128 x 152 x 36 | | 128 x 152 x 50 | 128 x 152 x 59 | mm |
| Weight (including cables) | 630 | 655 | 750 | 775 | 845 | 1064 | gr |
| Input Connector | MC4 ⁽³⁾ | | | Single or Dual MC4 ⁽⁴⁾ | | MC4 ⁽³⁾ | |
| Output Connector | | | | MC4 | | | |
| Output Wire Length | 0.95 | | | | 1.2 | | m |
| Operating Temperature Range | | | | -40 - +85 | | | °C |
| Protection Rating | | | | IP68 / NEMA6P | | | |
| Relative Humidity | | | | 0 - 100 | | | % |

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

⁽²⁾ When connecting modules with rated STC power >350Wp, labels with optimiser de-energising instructions may need to be attached to the optimisers.

For details refer to: http://www.solaredge.com/sites/default/files/se_optimizer_deenergizing_guide_aus.pdf

⁽³⁾ For other connector types please contact SolarEdge.

⁽⁴⁾ Dual version for parallel connection of 2 thin film modules; P/N: P405-5RMDMRM. In a case of odd number of PV modules in one string it is allowed to install one P405 dual version power optimiser connected to one PV module. When connecting a single module seal the unused input connectors with the supplied pair of seals.

| PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽⁶⁾ | | SINGLE PHASE HD-WAVE | SINGLE PHASE | THREE PHASE RESIDENTIAL ⁽⁷⁾ | THREE PHASE COMMERCIAL | |
|----------------------------------------------------------------|------------------|------------------------------------------|-----------------|-------------------------------------------|---------------------------|---|
| Minimum String Length (Power Optimisers) | P300, P370, P500 | 8 | | 8 per array | 16 | |
| | P404, P405, P505 | 6 | | 7 per array | 13 | |
| Maximum String Length (Power Optimisers) | | 25 | | 25 per array | 50 | |
| Maximum Power per String | | 5700 (6000 with SE8000H, SE10000H) | 5250 | 5700 | 11250 | W |
| Parallel Strings of Different Lengths or Orientations Notes | | | | Yes Connect 2 arrays | | |

⁽⁶⁾ It is not allowed to mix P404/P405/P505 with P300/P370/P500/P600/P700/P800 in one string. With the three phase residential inverters, use either P404/P405/P505 optimisers or P300/P350/P500 optimisers on an inverter.

⁽⁷⁾ Optimisers must be connected in two separate arrays. For complete design guidelines for the three phase residential inverters refer to: https://www.solaredge.com/sites/default/files/se_inverter_installation_guide_e_series_design_installation_addendum_aus.pdf

