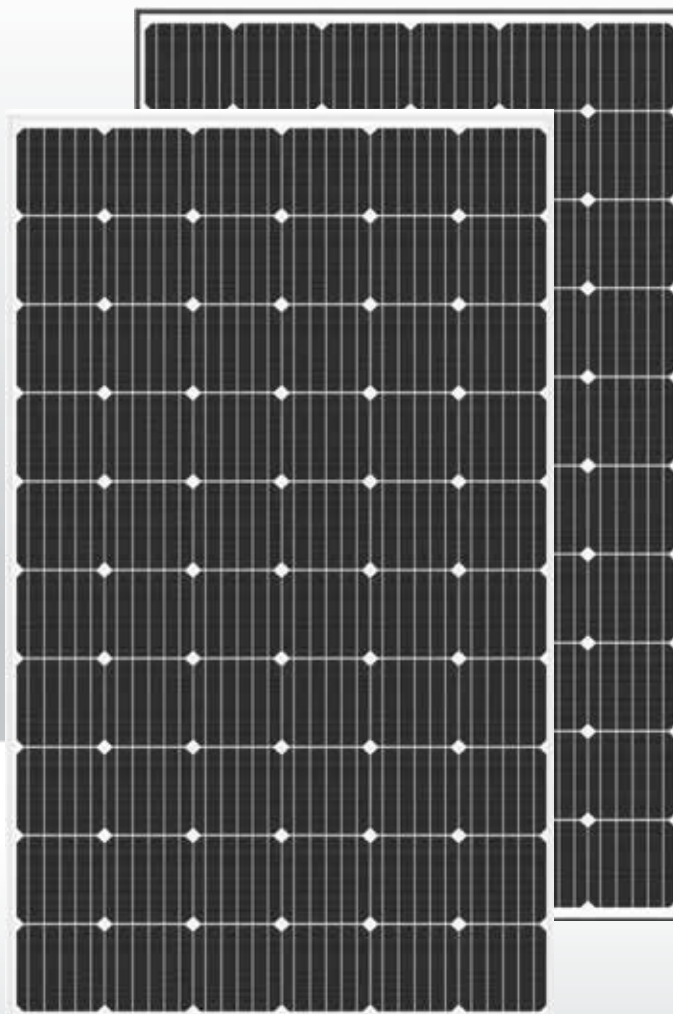


# ThinkTop series

300W / 305W / 310W **60 CELLS**  
High Efficiency PERC Cells



**PERLIGHT**  
smart.black



## **THINK TOP SERIES: PLM-300M-60 MONOCRYSTALLINE SILICON SOLAR MODULE**

310W OF POWER IN A STANDARD 60 CELL CONFIGURATION  
MORE POWER PER M<sup>2</sup>

20% MORE POWER THAN A CONVENTIONAL 60 CELL 250W MODULE  
MODULE EFFICIENCY OF 19.06%



PRODUCT  
WARRANTY



PERFORMANCE  
WARRANTY (80%)



POSITIVE  
TOLERANCE



MAX CELL  
EFFICIENCY



MAX MODULE  
EFFICIENCY



3 STEPS  
EL TEST

# ThinkTop series

## ELECTRICAL PERFORMANCE

| Module type             | PLM-300M-60 Series |   |       |       |       |       |       |       |
|-------------------------|--------------------|---|-------|-------|-------|-------|-------|-------|
| Power output            | $P_{max}$          | W | 290   | 295   | 300   | 305   | 310   | 315   |
| Power output tolerances | $\Delta P_{max}$   | % | 0 - 3 |       |       |       |       |       |
| Voltage at Pmax         | $V_{mpp}$          | V | 32.70 | 32.93 | 33.12 | 33.30 | 33.48 | 33.66 |
| Current at Pmax         | $I_{mpp}$          | A | 8.87  | 8.96  | 9.06  | 9.16  | 9.26  | 9.36  |
| Open-circuit voltage    | $V_{oc}$           | V | 39.57 | 39.85 | 40.08 | 40.29 | 40.51 | 40.73 |
| Short-circuit current   | $I_{sc}$           | A | 9.48  | 9.55  | 9.65  | 9.75  | 9.85  | 9.95  |
| Solar Module Efficiency | Eff.               | % | 17.83 | 18.13 | 18.44 | 18.75 | 19.05 | 19.36 |

STC:1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3.

## THERMAL CHARACTERISTICS

|                                    |                |      |        |
|------------------------------------|----------------|------|--------|
| Nominal operating cell temperature | NOCT           | °C   | 45 ± 2 |
| Temperature coefficient of Pmax    | $\gamma$       | %/°C | -0.40  |
| Temperature coefficient of Voc     | $\beta_{Voc}$  | %/°C | -0.30  |
| Temperature coefficient of Isc     | $\alpha_{Isc}$ | %/°C | 0.06   |
| Temperature coefficient of Vmpp    | $\beta_{Vmpp}$ | %/°C | -0.35  |

## OPERATING CONDITIONS

|   |                     |
|---|---------------------|
| Max. system voltage                         | 1000V <sub>DC</sub> |
| Limiting reverse current                    | 15A                 |
| Operating temperature range                 | -40°C to 85°C       |
| Max. static load front (e.g., snow)         | 5400Pa              |
| Max. static load back (e.g., wind)          | 2400Pa              |
| Max. hailstone impact (diameter / velocity) | 25mm / 23m/s        |

## MECHANICAL CHARACTERISTICS

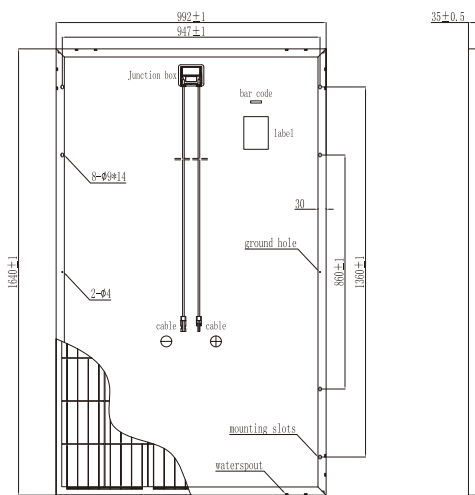
|                                     |  |
|-------------------------------------|--|
| Front cover (material / thickness)  | Tempered glass + ARC glass/3.2mm                 |
| Backsheet (color)                   | White  |
| Cell (quantity/material/dimensions) | 60 / monocrystalline silicon / 156.75 x 156.75mm |
| Frame (material / color)            | anodized aluminum alloy / Black / Silver         |
| Junction box (protection degree)    | ≥ IP67   |
| Cables & Plug connectors            | 900mm / 4mm <sup>2</sup> & MC4 compatible / IP67 |
| Module Dimensions (L / W / H)       | 1640mm x 992mm x 35mm                            |
| Module Weight                       | 18 kg  |

## PACKING DETAILS

|                       |       |       |
|-----------------------|-------|-------|
| Container             | 20'GP | 40'HQ |
| Pieces per pallet     | 60    | 66    |
| Pallets per container | 6     | 14    |
| Pieces per container  | 360   | 924   |

Perlight Partners

## Module Diagram:



## Electrical Curves:

