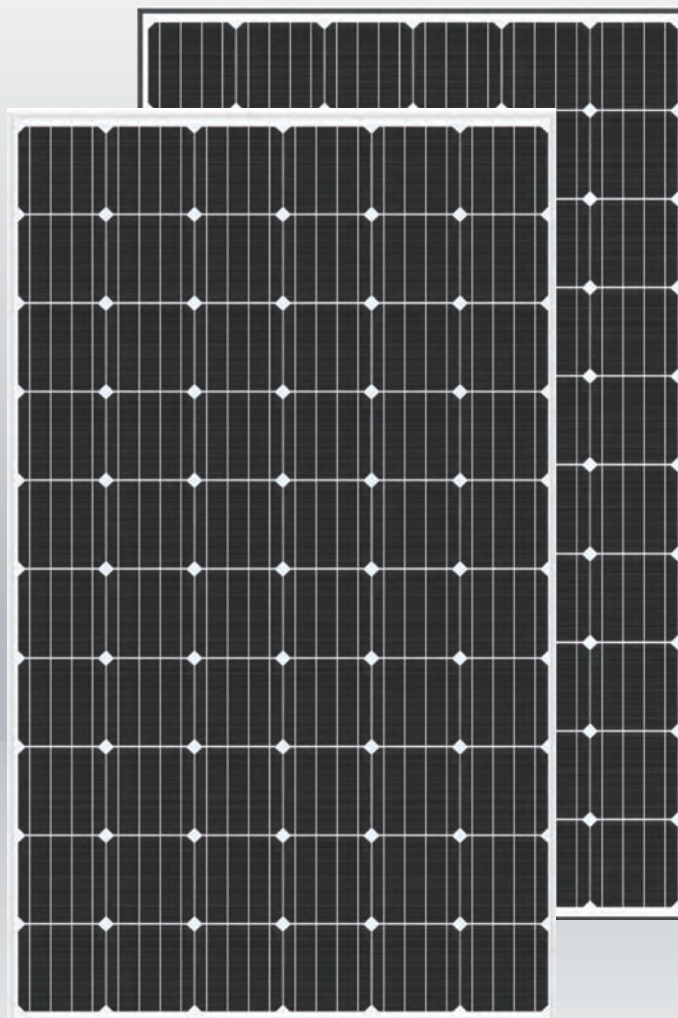


# ThinkTop series

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



PERLIGHT



## 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



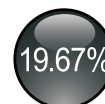
PERFORMANCE  
WARRANTY (80%)



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   | 320   |  |
| Power output tolerances | $\Delta P_{max}$   | % | 0 - 3 |       |       |       |       |       |       |  |
| Voltage at Pmax         | $V_{mpp}$          | V | 31.98 | 32.25 | 32.54 | 32.73 | 33.13 | 33.55 | 34.01 |  |
| Current at Pmax         | $I_{mpp}$          | A | 9.07  | 9.15  | 9.22  | 9.32  | 9.36  | 9.39  | 9.41  |  |
| Open-circuit voltage    | $V_{oc}$           | V | 39.58 | 39.89 | 40.11 | 40.33 | 40.73 | 41.15 | 41.55 |  |
| Short-circuit current   | $I_{sc}$           | A | 9.46  | 9.52  | 9.61  | 9.7   | 9.74  | 9.76  | 9.77  |  |
| Solar Module Efficiency | Eff.               | % | 17.83 | 18.14 | 18.45 | 18.75 | 19.06 | 19.37 | 19.67 |  |

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    | $\mu$          | %/°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

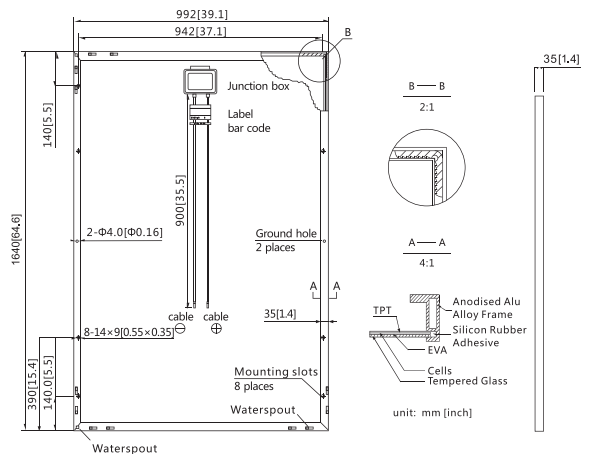
|                                     |  |
|-------------------------------------|--|
| Front cover (material / thickness)  | Tempered glass + ARC glass/3.2mm             |
| Backsheet (color)                   | White  |
| Cell (quantity/material/dimensions) | 60/monocrystalline silicon/156x156mm         |
| Frame (material / color)            | anodized aluminum alloy / Black / White      |
| 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                       | 17.6kg                                       |

## 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:

