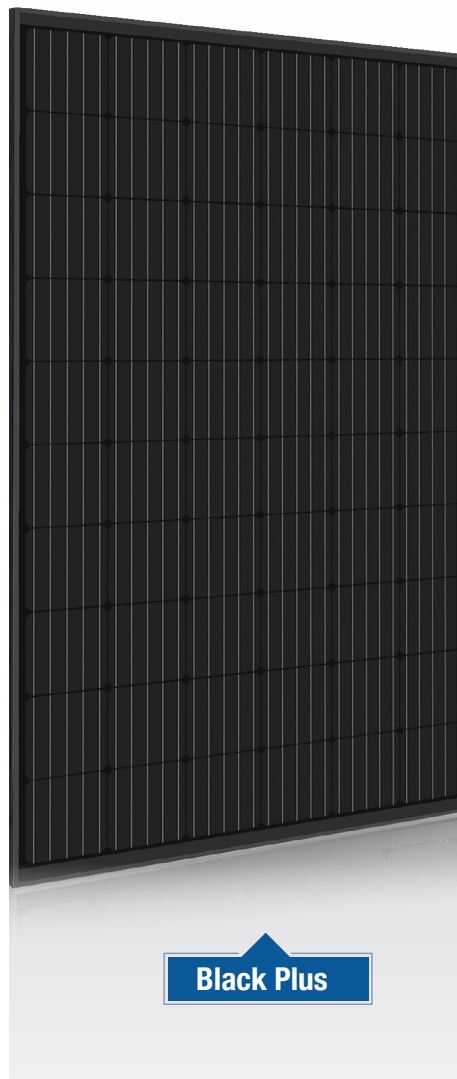




PERLIGHT  
smart.black

# 320W PLUS<sup>+</sup> MONO 60 CELL SERIES

PLM-320M-60 • PLM-320MB-60



Black Plus

Powered by **Tigo**<sup>®</sup>

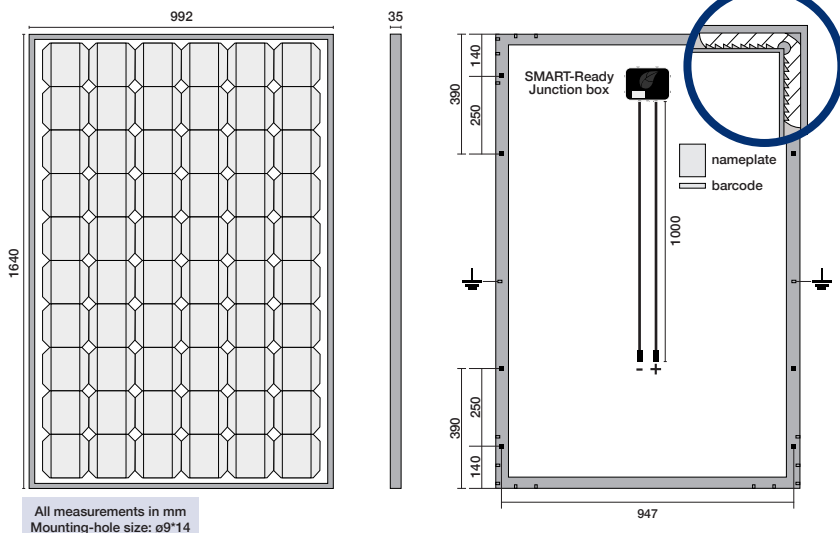
- ✓ Field replaceable diode cover
- ✓ Lower junction box temperature
- ✓ Upgradable to add functionality
- ✓ Cover upgrade options:
  - Module-level monitoring
  - Advanced Safety
  - Optimisation
  - Long Strings
- ✓ Approved by all major inverter manufacturers

Guaranteed by **PERLIGHT**

- ✓ Quality Guaranteed
- ✓ 12 Year Workmanship Warranty
- ✓ 25 Year Output Performance Warranty
- ✓ >90% Output for 12 Years
- ✓ >80% Output for 25 Years
- ✓ Over 30 Years Manufacturing Experience



## MODULE FRAME



- ✓ Extremely reliable screw-less, interconnected frame for long-term flexibility and strength.
- ✓ 8 mounting holes for direct mounting option.
- ✓ Suitable for Insertion System on both long and short sides.
- ✓ 20 in-built drainage waterspouts.
- ✓ 2 earth (ground) points.
- ✓ Tempered ARC (anti-reflective) Front Glass.

Long Side Clamping Zones:  
0mm to 410mm from edge.

Short Side Clamping Zones:  
0mm to 248mm from edge.

## ELECTRICAL PERFORMANCE

| Model Number                | PLM-320M-60        | PLM-320MB-60 |
|-----------------------------|--------------------|--------------|
| Power Output                | P <sub>max</sub> W | 320          |
| Voltage at P <sub>max</sub> | V <sub>mp</sub> V  | 34.01        |
| Current at P <sub>max</sub> | I <sub>mp</sub> A  | 9.41         |
| Open-circuit voltage        | V <sub>oc</sub> V  | 41.55        |
| Short-circuit current       | I <sub>sc</sub> A  | 9.77         |
| Solar Module Efficiency     | %                  | 19.67        |
| Power Tolerance             | %                  | -0/+3        |

## MECHANICAL CHARACTERISTICS

|                   |                                 |
|-------------------|---------------------------------|
| Front cover       | 3.2mm Tempered ARC glass        |
| Backsheet colour  | Black/White                     |
| Type of Cells     | Mono PERC 156.75x156.75mm       |
| Number of Cells   | 60                              |
| Frame             | Black/Silver Anodised Aluminium |
| Junction box      | TIG0 TS4 IP67                   |
| Cables            | 1000mm/4mm <sup>2</sup>         |
| Connectors        | MC4 compatible IP67             |
| Module dimensions | 1640 x 992 x 35mm               |
| Module weight     | 18kg                            |

## PERLIGHT PLUS SERIES - A NEW GENERATION OF SMART PV MODULES

High-performance PERC cell modules available in three elegant styles.

**SilverPlus<sup>+</sup>**: Classic white backsheet & silver frame

**BW Plus<sup>+</sup>**: Clean white backsheet with a sleek black frame.

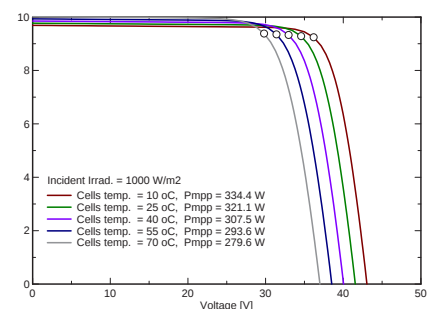
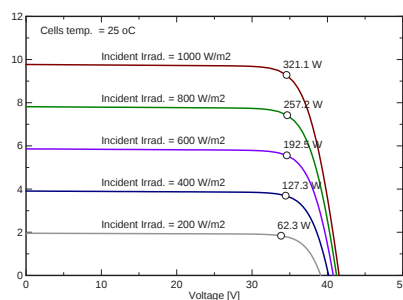
**BlackPlus<sup>+</sup>**: Black backsheet & black frame.

Expertly crafted, Perlight solar modules are built to deliver optimum performance in all applications and environments including low light levels.

Each Plus Series module is integrated with the advanced Tigo Smart-Ready junction box, which offers greater reliability than a conventional junction box due to lower operating temperature and an interchangeable diode cover. Furthermore, the diode cover can be upgraded at any time to offer module-level monitoring, optimisation for shaded arrays, enhanced safety features and much more. Visit [www.westech-solar.co.uk](http://www.westech-solar.co.uk) for more details.

## ELECTRICAL CURVES

320W (PLM-320M-60, PLM-320MB-60)



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

## OPERATING CONDITIONS

|                                     |               |
|-------------------------------------|---------------|
| Max. system voltage                 | 1000VDC       |
| 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               | 25mm@23m/s    |

## THERMAL CHARACTERISTICS

|                                    |            |
|------------------------------------|------------|
| NOCT                               | 45±2 °C    |
| Temp. coefficient P <sub>max</sub> | -0.40 %/°C |
| Temp. coefficient V <sub>oc</sub>  | -0.30 %/°C |
| Temp. coefficient I <sub>sc</sub>  | 0.06 %/°C  |
| Temp. coefficient V <sub>mp</sub>  | -0.35 %/°C |

- ✓ MCS Certified
- ✓ Positive output tolerance
- ✓ Fire safety certified
- ✓ PID-Free certified
- ✓ Ammonia corrosion resistance certified
- ✓ Salt mist corrosion resistance certified
- ✓ Worldwide accreditation



## MANUFACTURING BASE

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