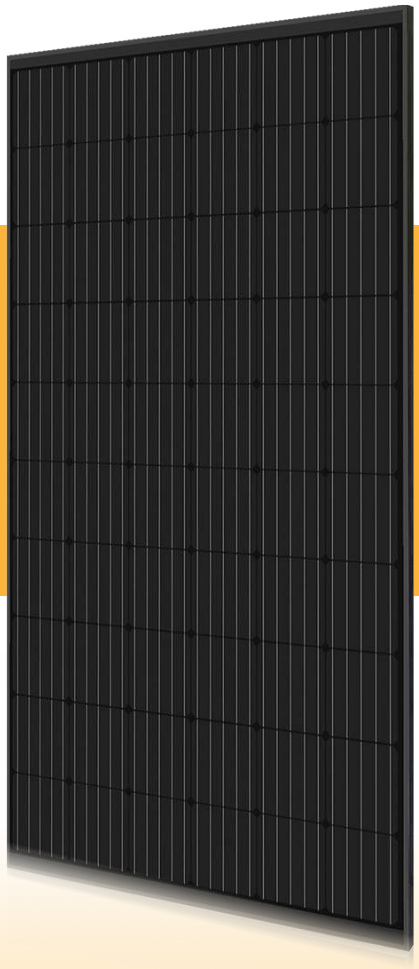
PERLIGHT
smart.black

PLM-310MB-60

MONO BLACK PLUS

310 WATTS 60 CELLS



The Mono Black Plus Series is an excellent all-round module, which is sleek and robust. Proven performance, stylish appearance and high-efficiency monocrystalline PERC cells. Concealed link busbars at either end of the module provide a more elegant finish than other black modules on the market. Crafted with precision and expert skill, the Black Plus Series offers outstanding build quality and reliability from a trusted, high-quality manufacturer. Smart-Ready as standard, each module is equipped to deliver the latest advanced Smart technology thanks to its integrated Tigo TS4 junction box with Smart Module upgrade capability for real-time individual module monitoring, optimised performance for shade effected arrays and advanced safety functions.

Guaranteed by PERLIGHT

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

Powered by Tigo

- ✓ 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

19.05%
MAX EFFICIENCY

310W
MAX POWER OUTPUT

SMART-READY
LOW COST UPGRADES

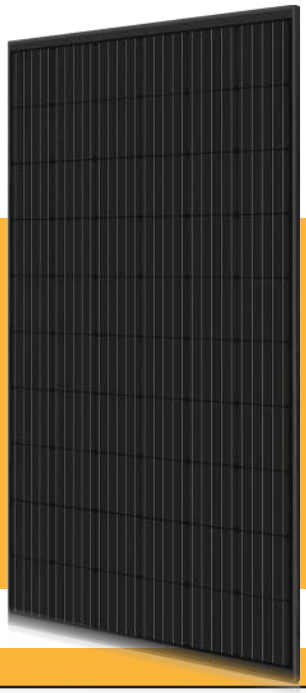
PERC
PASSIVE EMITTER REAR CELL TECH

12 YEAR
PRODUCT WARRANTY

25 YEAR
PERFORMANCE WARRANTY

Supplied by WESTECHSOLAR

PERLIGHT
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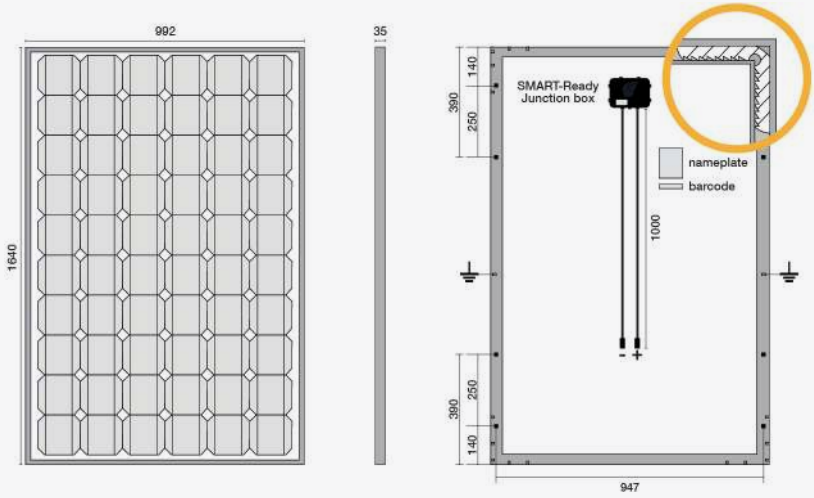


PLM-310MB-60

MONO BLACK PLUS

310 WATTS 60 CELLS

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.

All measurements in mm. Mounting-hole size: ø9*14.

MECHANICAL CHARACTERISTICS

Front cover	3.2mm Tempered ARC glass
Backsheet colour	Black
Type of Cells	Mono PERC 156.75x156.75mm
Number of Cells	60
Frame	Black Anodised Aluminium
Junction box	TIGO TS4 IP67
Cables	1000mm/4mm²
Connectors	MC4 compatible IP67
Module dimensions	1640 x 992 x 35mm
Module weight	18kg

OPERATING CONDITIONS

Max. system voltage	1000VDC
Limiting reverse current	15A
Operating temperature range	-40ºC to 85ºC
Max. static load front (e.g., snow)	5400Pa
Max. static load back (e.g., wind)	2400Pa
Max. hailstone impact	25mm@23m/s

THERMAL CHARACTERISTICS

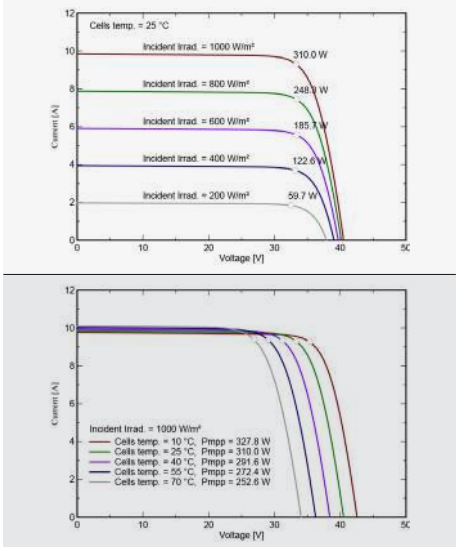
NOCT	45±2 ºC
Temp. coefficient Pmax	-0.40 %/ºC
Temp. coefficient Voc	-0.30 %/ºC
Temp. coefficient Isc	0.06 %/ºC
Temp. coefficient Vmpp	-0.35 %/ºC

ELECTRICAL PERFORMANCE

Power Output	Pmax	W	310
Voltage at Pmax	Vmp	V	33.48
Current at Pmax	Imp	A	9.26
Open-circuit voltage	Voc	V	40.51
Short-circuit current	Isc	A	9.85
Solar Module Efficiency		%	19.05
Power Tolerance		%	-0/+3

STC: 1000W/m², temperature 25°C, AM = 1.5g

ELECTRICAL CURVES



CERTIFICATIONS

MCS Certified
Fire safety certified
PID-Free certified
Ammonia corrosion resistance certified
Salt mist corrosion resistance certified
Worldwide accreditation

PV CYCLE
WEE/BB4647YX

CONTACT INFO

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