



PERLIGHT
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DELTA BLACK

60 CELL SERIES • 320W • 310W • 300W

- ✓ **PREMIUM QUALITY**
AESTHETICS & HIGH-PERFORMANCE
- ✓ **SLEEK**
UNOBTRUSIVE DESIGN
- ✓ **SMART-READY**
AT NO EXTRA COST
- ✓ **EASY UPGRADE TO SMART**
AT LOW COST



GUARANTEED BY



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PERC PASSIVATED EMITTER
REAR CELL TECH

POWERED BY **Tigo**®

- ✓ **FIELD REPLACEABLE DIODE COVER**
- ✓ **LOWER JUNCTION BOX TEMPERATURE**
- ✓ **UPGRADABLE TO ADD FUNCTIONALITY**
- ✓ **COVER UPGRADE OPTIONS:**
 - **MODULE-LEVEL MONITORING**
 - **OPTIMISATION**
 - **LONG STRINGS**
- ✓ **APPROVED BY ALL MAJOR INVERTER MANUFACTURERS**

- ✓ **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



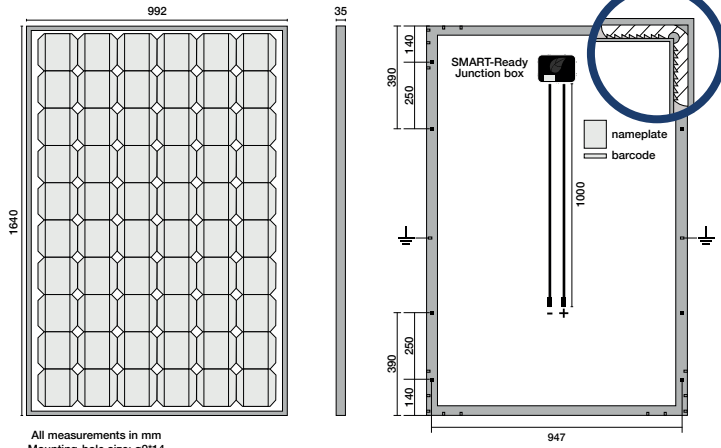
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MODULE FRAME



All measurements in mm
Mounting-hole size: $\varnothing 9 \times 14$

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/4mm ²
Connectors	MC4 compatible IP67
Module dimensions	1640 x 992 x 35mm
Module weight	18kg

ELECTRICAL PERFORMANCE

Model Number	PLM-320MA-60	PLM-310MA-60	PLM-300MA-60
Power Output	P _{max} W 320	310	300
Voltage at P _{max}	V _{mp} V 33.84	33.48	33.12
Current at P _{max}	I _{mp} A 9.46	9.26	9.06
Open-circuit voltage	V _{oc} V 40.95	40.51	40.08
Short-circuit current	I _{sc} A 10.05	9.85	9.65
Solar Module Efficiency	% 19.67	19.05	18.44
Power Tolerance	% -0/+3	-0/+3	-0/+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 _{max}	-0.40 %/°C
Temp. coefficient V _{oc}	-0.30 %/°C
Temp. coefficient I _{sc}	0.06 %/°C
Temp. coefficient V _{mpp}	-0.35 %/°C

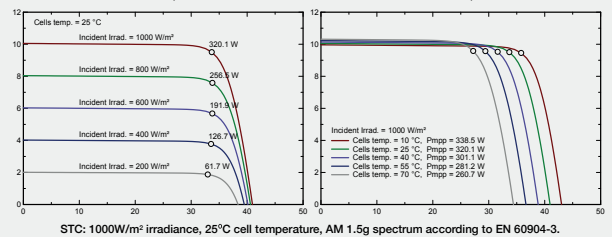
- ✓ Extremely reliable screw-less, interconnected frame for long-term flexibility and strength.
- ✓ 8 mounting holes for direct mounting option.
- ✓ Suitable for Insertion System on both long and short sides.
- ✓ 20 in-built drainage waterspouts.
- ✓ 2 earth (ground) points.
- ✓ Tempered ARC (anti-reflective)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

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

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

ELECTRICAL CURVES

320W (PLM-320MA-60)



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



Official Perlight UK & EU Customer Centre

