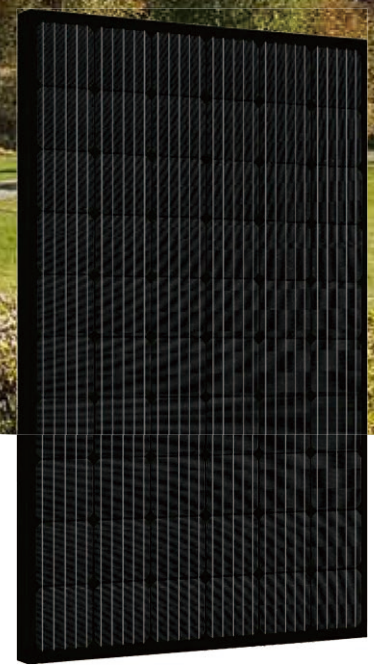




**PERLIGHT**  
smart.black



**MONOCRYSTALLINE SOLAR MODULE**

**PLM-330MB-60  
BLACK PLUS SERIES**

**PERLIGHT SOLAR**

Founded in 2006, Perlight Solar is growing to be the world leading residential smart solar PV products manufacturer & service provider.

Based on more than 30 years manufacturing experience of Baolite Group, along with the implementation of MES & ERP system, Perlight Solar have realized lean and flexible manu-

facturing of solar cell & solar module.

With corporate values "Customer First, Talent Excellence, Pragmatic Innovation, Integrity & Win-Win", Perlight Solar will continue to provide excellent smart energy products & service to global families and vision to be the leading brand in global distributed smart energy.

**19.78%**  
Maximum Module Efficiency

**12 YEAR**  
Limited Product Warranty

**25 YEAR**  
Performance Warranty



**Performance**

Good performance even under low light conditions



**Reliability**

Strict selection of raw materials and strict quality control ensure reliability



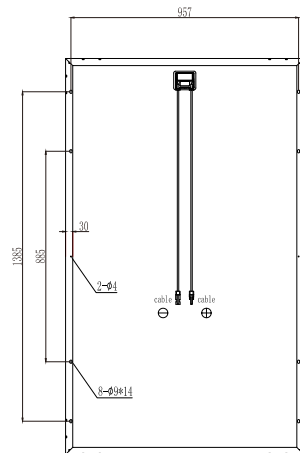
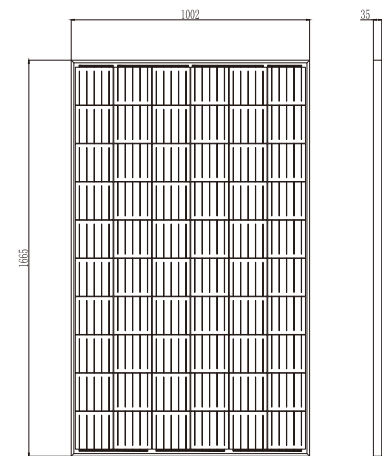
**Smart**

Optional smart-ready design. Easy upgrade into smart solar module solution

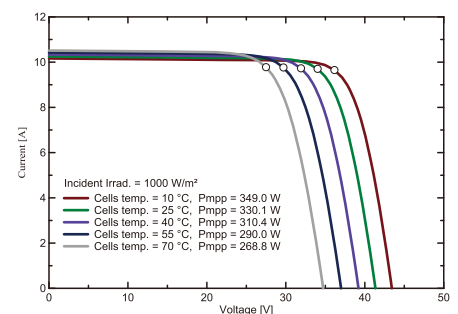
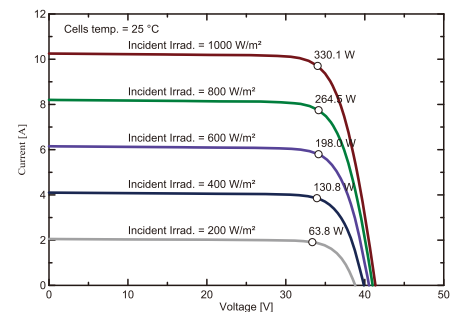
**PERLIGHTSOLAR**

# MONOCRYSTALLINE 60-CELL SERIES

## Module Diagram:



## Electrical Curves:



### ELECTRICAL PERFORMANCE

Module type	PLM-330MB-60 BLACK PLUS SERIES								
Power output	$P_{max}$	$W_p$	300	305	310	315	320	325	330
Voltage at Pmax	$V_{mpp}$	V	33.37	33.54	33.67	33.87	33.96	34.18	34.32
Current at Pmax	$I_{mpp}$	A	8.99	9.10	9.22	9.30	9.42	9.51	9.63
Open-circuit voltage	$V_{oc}$	V	40.58	40.76	40.85	40.96	41.12	41.33	41.52
Short-circuit current	$I_{sc}$	A	9.42	9.60	9.75	9.84	9.98	10.11	10.23
Module Efficiency	Eff.	%	17.98	18.28	18.58	18.88	19.18	19.48	19.78

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

### THERMAL CHARACTERISTICS

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

### 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

### MECHANICAL CHARACTERISTICS

Front cover (material / thickness)	low-iron tempered glass / 3.2mm
Backsheet (color)	black
Cell (quantity / material / dimensions)	60 / monocrystalline silicon / 158.75×158.75mm
Frame (material / color)	anodized aluminum alloy / black
Junction box (protection degree)	≥ IP67
Cables & Plug connectors	900mm / 4mm <sup>2</sup> & MC4 compatible / IP67
Module Dimensions (L / W / H)	1665mm x 1002mm x 35mm
Module Weight	18.1kg

### PACKING DETAILS

Container	20'GP	40'HQ
Pieces per pallet	54	66
Pallets per container	6	14
Pieces per container	324	924



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