



**PERLIGHT SOLAR**  
Powering Possibilities

# PERLIGHT DELTA 300W

## PLM-300MB-54

Monocrystalline Solar Module

**19.91%**  
Efficiency

*Truly All Black*

**300W**  
Power

*Compact & Powerful*

**30-YEAR**  
Warranty

*Perfect for tight spaces*



### MODULE FEATURES



#### BEAUTIFUL APPEARANCE

Ultra-sleek with consistent tone, providing a modernised look.



#### RELIABILITY

Strict selection of raw materials and strict quality control ensure reliability.



#### PERFORMANCE

Good performance even under low light conditions.

### QUALITY MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

IEC61215/61730, IEC62804(PID), IEC61701 (Salt), IEC62716 (Ammonia), IEC60068-2-68 (Sand)  
ISO 9001:2015 / quality management system  
ISO 14001:2015 / environmental management system  
ISO 45001:2018 / occupation health safety management system  
ISO 50001:2011 / energy management system  
IEC TS 62941 - 2016 / PV industry quality management system

### ETHICAL MANUFACTURING STANDARDS



The SA8000® Standard helps secure ethical working conditions for millions of workers globally. Established by Social Accountability International, the Standard leverages the power of businesses and consumers to purchase products or services from workplaces that enrich the livelihoods of people.

As a Sedex member we are committed to being a responsible business, sourcing responsibly, and improving ethical standards and working conditions within the supply chain.

**Sedex** Member

### EXTENDED POWER OUTPUT WARRANTY

**30** years limited product warranty

**30** years performance warranty

30 year performance warranty:  
12 years over 90% of original output,  
30 years over 80% of original output





## ELECTRICAL CHARACTERISTICS (STC)

Module Type:	PLM-290MB-54	PLM-295-MB-54	PLM-300MB-54
Maximum Power - Pm (W)	290	295	300
Open Circuit Voltage - Voc (V)	37.24	37.45	37.65
Short Circuit Current - Isc [A]	10.45	10.55	10.66
Maximum Power Voltage - Vm [V]	29.38	29.59	29.82
Maximum Power Current - Im [A]	9.87	9.97	10.06
Module Efficiency - η [%]	19.25	19.54	19.91

## ELECTRICAL CHARACTERISTICS AT NMOT

Maximum Power - Pm (W)	223	227	230
Open Circuit Voltage - Voc (V)	34.38	34.58	34.76
Short Circuit Current - Isc [A]	8.88	8.97	9.06
Maximum Power Voltage - Vm [V]	26.78	26.97	27.18
Maximum Power Current - Im [A]	8.32	8.40	8.48

Note: 1. Standard Test Conditions [STC]: irradiance 1000 W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;  
2. Nominal Module Operating Temperature (NMOT): Irradiance 800 W/m<sup>2</sup>; wind speed 1 m/s, ambient temperature 20°C;  
3. Tolerance of Pm: +/-5%, Measuring uncertainty of power: +/-3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: +/-3%

## MECHANICAL PARAMETERS

Dimensions	1504 x 1002 x 35 mm
Weight	17 kg
Front Glass	3.2 mm low-iron tempered glass
Frame	Black anodised aluminium
Cells	Mono-crystalline silicon 158.75*158.75
Number of Cells	54
Junction Box	IP68
Cable	4mm <sup>2</sup> , 900mm
Connector	Stäubli MC4 EVO 2A

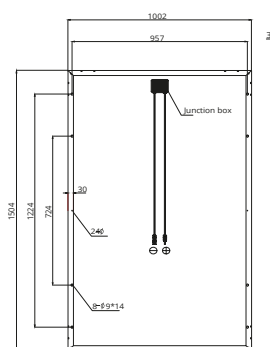
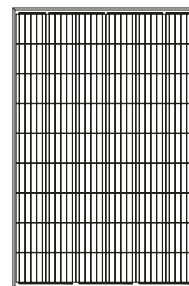
## TEMPERATURE PARAMETERS

NMOT	45°C (±2°C)
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	+0.06%/°C
Temperature Coefficient of Pm	-0.40%/°C

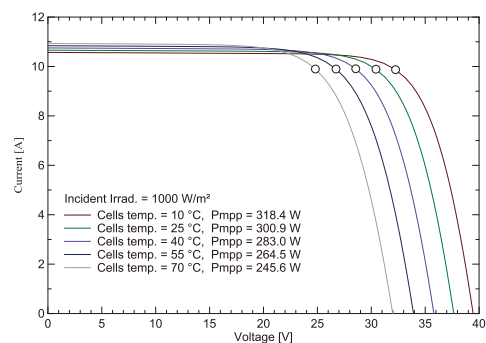
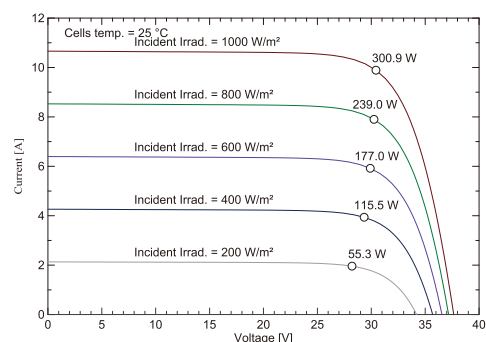
## MAXIMUM RATINGS

Maximum System Voltage [V]	1000VDC
Limiting Reverse Current [A]	15
Maximum Surface Load Capacity [Pa]	Front 5400 / Back 2400
Temperature Range [°C]	-40 ~ +85
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s

## DRAWINGS



## I-V CURVE



## CLAMPING ZONES

Long Side	300mm to 400mm from edge
Short Side	60mm to 200mm from edge