



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.

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

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





ELECTRICAL CHARACTERISTICS (STC)

Module Type:	PLM-290MB-54	PLM-295-MB-54	PLM-300MB-54
Maximum Power - P _m (W)	290	295	300
Open Circuit Voltage - Voc (V)	37.24	37.45	37.65
Short Circuit Current - I _{sc} [A]	10.45	10.55	10.66
Maximum Power Voltage - V _m [V]	29.38	29.59	29.82
Maximum Power Current - I _m [A]	9.87	9.97	10.06
Module Efficiency - η [%]	19.25	19.54	19.91

ELECTRICAL CHARACTERISTICS AT NMOT

Maximum Power - P _m (W)	223	227	230
Open Circuit Voltage - Voc (V)	34.38	34.58	34.76
Short Circuit Current - I _{sc} [A]	8.88	8.97	9.06
Maximum Power Voltage - V _m [V]	26.78	26.97	27.18
Maximum Power Current - I _m [A]	8.32	8.40	8.48

Note: 1. Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Nominal Module Operating Temperature (NMOT): Irradiance 800 W/m²; wind speed 1 m/s, ambient temperature 20°C;
3. Tolerance of P_m: +/-5%, Measuring uncertainty of power: +/-3%, Performance deviation of Voc [V], I_{sc} [A], V_m [V] and I_m [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 ² , 900mm
Connector	Stäubli MC4 EVO 2A

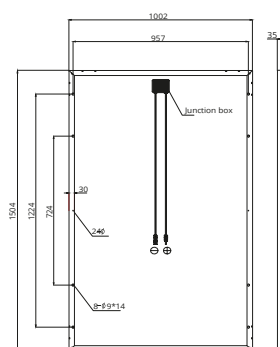
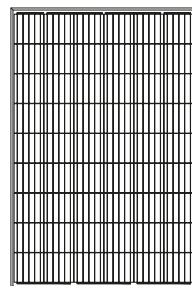
TEMPERATURE PARAMETERS

NMOT	45°C (±2°C)
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of I _{sc}	+0.06%/°C
Temperature Coefficient of P _m	-0.40%/°C

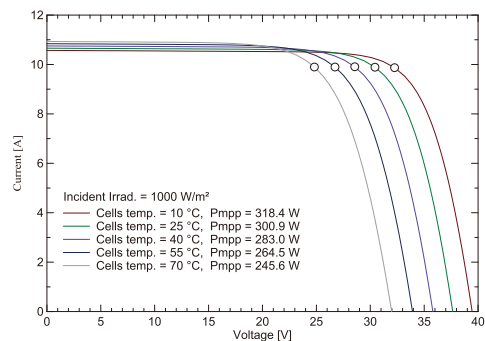
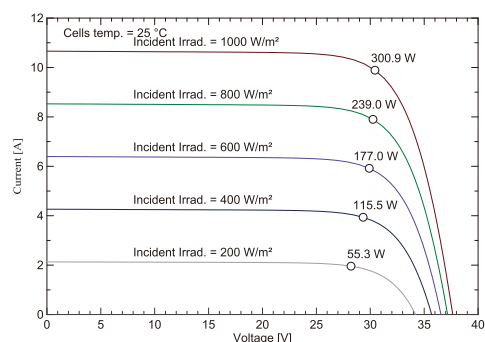
MAXIMUM RATINGS

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