



PERLIGHT
smart.black

PERLIGHT DELTA 425W

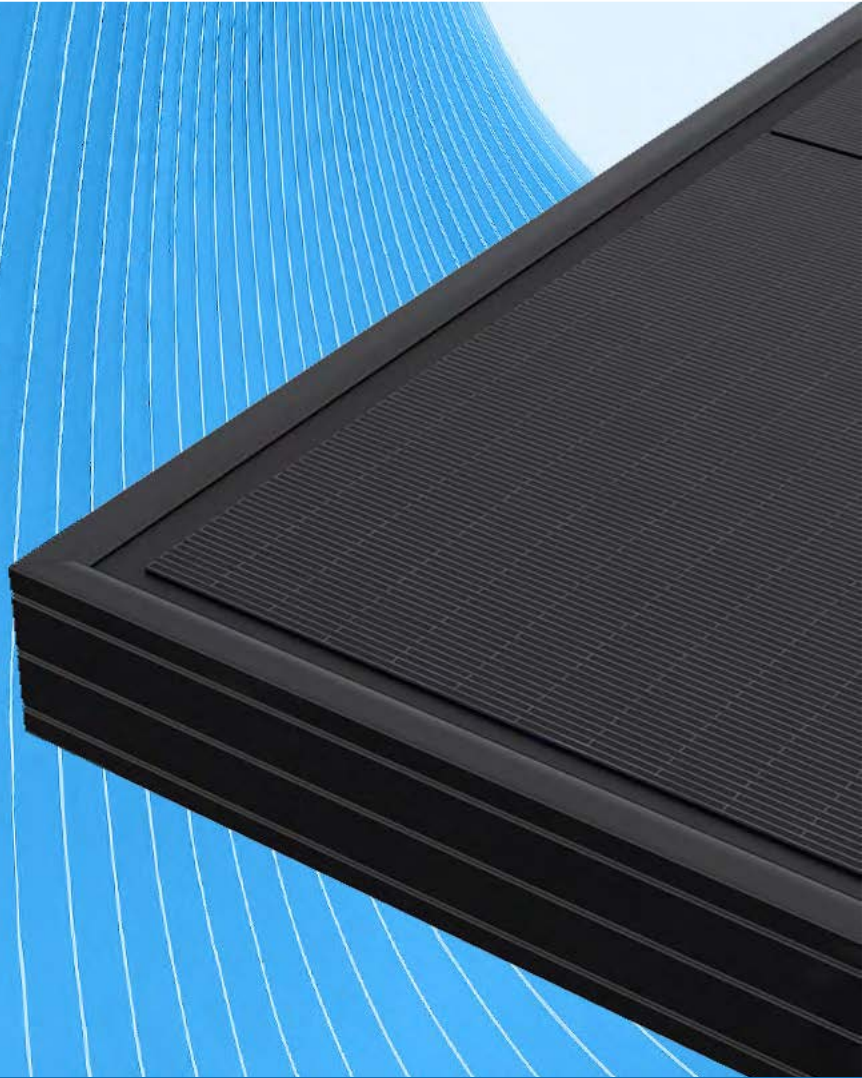
PLM-425OM10A-44B

Monocrystalline PERC Solar Module

21.4%
Efficiency

425W
Power

30-YEAR
Warranty



MODULE FEATURES



TECHNOLOGY
Innovative structure, high density cell layout.



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



SAFETY AND RELIABILITY
Lower operating temperature and high pressure-resistance.



LOW SYSTEM COST
High module efficiency, reducing system cost.



LOW HOT SPOT EFFECT
Prolong module lifetime. Reduce electricity loss during generation.



LOWER SHADING LOSS
Parallel layout reduces shading effect compared to conventional modules.

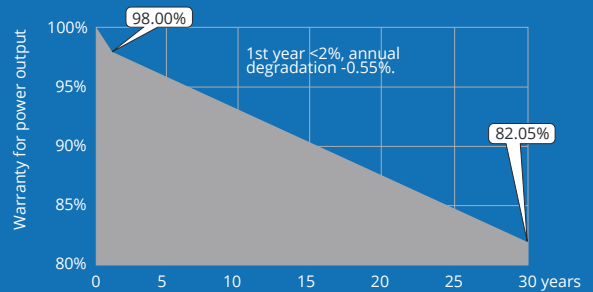


BETTER FOR THE ENVIRONMENT
More environmentally friendly, Fluorine-free and low Pb levels.

LINEAR POWER OUTPUT WARRANTY

30 30-year warranty for materials.

30 30-year warranty for linear power 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



ELECTRICAL CHARACTERISTICS (STC)

Module Type:	425	420	415	410	405
Maximum Power - P _m (W)	425	420	415	410	405
Open Circuit Voltage - Voc (V)	41.7	41.6	41.5	41.4	41.3
Short Circuit Current - I _{sc} [A]	13.03	12.92	12.80	12.65	12.53
Maximum Power Voltage - V _m [V]	34.6	34.5	34.4	34.4	34.3
Maximum Power Current - I _m [A]	12.30	12.19	12.08	11.97	11.86
Module Efficiency - η [%]	21.4	21.1	20.9	20.6	20.4

ELECTRICAL CHARACTERISTICS AT NMOT

Maximum Power - P _m (W)	320	316	312	309	305
Open Circuit Voltage - Voc (V)	39.8	39.7	39.6	39.5	39.4
Short Circuit Current - I _{sc} [A]	10.50	10.41	10.31	10.19	10.09
Maximum Power Voltage - V _m [V]	33.0	32.9	32.8	32.8	32.7
Maximum Power Current - I _m [A]	9.70	9.62	9.53	9.41	9.33

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: +/-3%, Measuring uncertainty of power: +/-3%. Performance deviation of Voc [V], I_{sc} [A], V_m [V] and I_m [A]: +/-3%

MECHANICAL PARAMETERS

Dimensions	1812 x 1096 x 30 mm
Weight	20.8 kg
Front Glass	tempered glass, 3.2mm
Frame	Anodized aluminum profile
Cells	Mono-crystalline solar cell
Cell Orientation	305 (61 x 5)
Junction Box	IP68, two diodes
Cable	4mm ² , 1300mm/1300mm
Packaging	36pcs/box; 924pcs/40'container
Connector	Stäubli MC4 EVO 2A

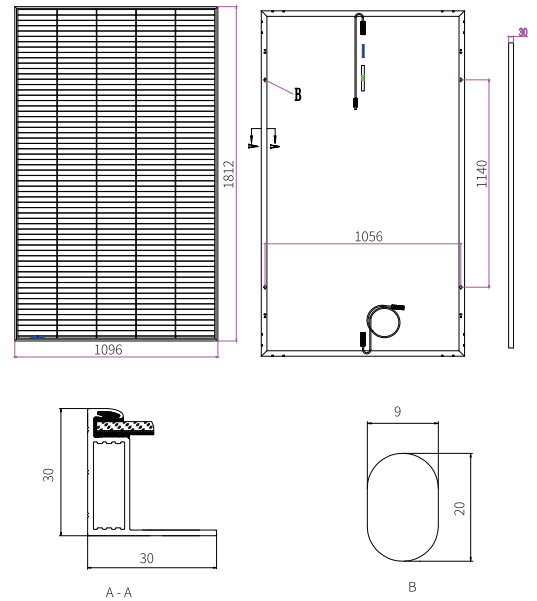
TEMPERATURE PARAMETERS

NMOT	42.3°C (±2°C)
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of I _{sc}	+0.04%/°C
Temperature Coefficient of P _m	-0.34%/°C

MAXIMUM RATINGS

Maximum System Voltage [V]	DC1500 (IEC)
Series Fuse Rating [A]	25
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

