



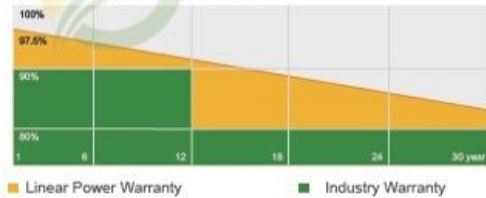
**Mono** 580W 22.3% 182mm  
 MAXIMUM POWER OUTPUT MAXIMUM EFFICIENCY SOLAR CELL  
 10/11BB ULM 144S 545-580 Series

**Introduction**

Assembled with high-efficiency Multi-busbar PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.

**Superior Warranty**

- 15-year product warranty
- 30-year power warranty
- 0.45% annual power consumption



- Higher output power
- Less shading effect
- Lower temperature coefficient
- Better mechanical loading tolerance

**Comprehensive Certificates**

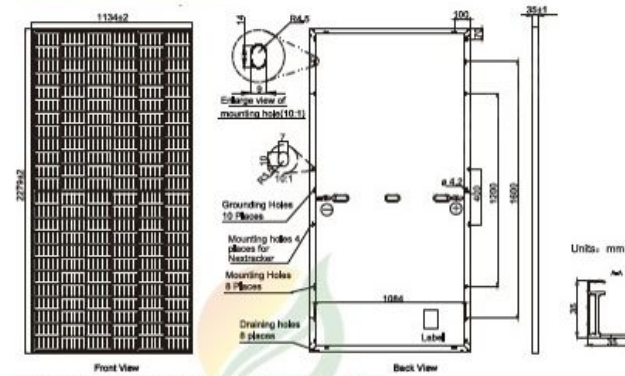
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems



**ULEE INTERNATIONAL**

**ULM- 545-580**

**MECHANICAL DIAGRAMS**



**SPECIFICATIONS**

Cell	182mm half cut
Weight	28.6kg±3%
Dimension	2279±2mmx1134±2mmx35/30mm 2256±2mmx1134±2mmx35/30mm
Glass	3.2mm low-iron tempered suede glass
No. of cells	144(6x24)
Junction Box	IP28,3diodes
Cable&Connector	4mm²,EVO2 or EVO2 compatible
Modules Per Pallet	31/30pieces
Modules Per 40HQ	640/730pcs

**ELECTRICAL PARAMETERS AT STC**

TYPE	ULM144S-545	ULM144S-550	ULM144S-555	ULM144S-560	ULM144S-570	ULM144S-580
Rated Maximum Power Pmax(W)	545	550	555	560	570	580
Open Circuit Voltage Voc(V)	49.45	49.60	49.75	49.90	50.05	50.20
Maximum Power Voltage Vmp(V)	41.50	41.65	41.80	41.95	42.10	42.60
Short Circuit Current Isc(A)	13.93	14.00	14.07	14.14	14.21	14.28
Maximum Power Current Imp(A)	13.13	13.21	13.29	13.37	13.45	13.53
Module Efficiency (%)	21.3	21.5	21.7	21.9	22.1	22.3
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α <sub>Isc</sub> )	+0.045%/°C					
Temperature Coefficient of Voc(β <sub>Voc</sub> )	-0.275%/°C					
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.350%/°C					

STC Irradiance 1000W/m², cell temperature 25°C, AM1.5G

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types. Measurement tolerance at STC: Pmax ±3 %, Voc ±2% and Isc ±4%.

**ELECTRICAL PARAMETERS AT NOCT**

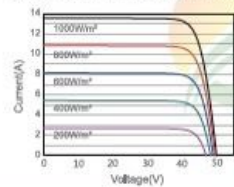
TYPE	ULM144S-545	ULM144S-550	ULM144S-555	ULM144S-560	ULM144S-570	ULM144S-580
Rated Maximum Power Pmax(W)	412	416	420	424	428	432
Open Circuit Voltage Voc(V)	46.55	46.68	46.81	46.94	47.07	47.20
Maximum Power Voltage Vmp(V)	39.20	39.43	39.66	39.89	40.12	40.35
Short Circuit Current Isc(A)	11.13	11.17	11.21	11.25	11.29	11.33
Maximum Power Current Imp(A)	10.51	10.55	10.59	10.63	10.67	10.71

**OPERATING CONDITIONS**

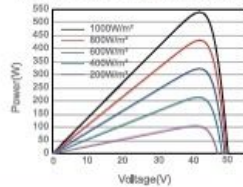
Maximum System Voltage	1500V DC(IEC)
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	25A
Maximum Static Load,Front	5400Pa, 1.5
Maximum Static Load,Back	2400Pa, 1.5
NOCT	45±2°C
Application Class	Class A

**CHARACTERISTICS**

Current-Voltage Curve ULM144S-545



Power-Voltage Curve ULM144S-545



Current-Voltage Curve ULM144S-545

