



MONO BI-FACIAL TWIN SERIES



Harvesting

THE POWER OF SUN

KEY FEATURES



MBB HC Technology with smart soldering and excellent low light performance



Bypass diodes and innovative series parallel connections enable the module to perform better in Partial shadow conditions.



Three separate junction boxes reduce internal resistance and Improve heat dissipation



Improved field reliability due to multiple contact points on the cell ,reduce micro cracks and lower risk of hot spot



First choice for millions of banks and investors, this size is well-suited for almost all PV applications.



Higher module conversion efficiency(up to 21.27%) benefit from Passivated Emmitter Rear Contact (PERC) technology



IP68 junction box for long-term weather endurance.



Heavy snow load up to 5400 Pa.
Wind load upto 2400Pa.



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient



Certified for PID free modules.

ISO9001:2015, ISO 14001:2004, OHSAS 18001:2007 Certified Company
IEC61215, IEC61730, IEC62804(PID), IEC61701, IEC62716, IEC61853 Certified Products



PERC MONO-BI-FACIAL SOLAR MODULE, MBB, 144 • M10 HALF-CELL • 530 - 550 WATT

FRAMED GLASS TRANSPARENT BACKSHEET BIFACIAL MODULE

ELECTRICAL PARAMETERS AT STANDARD TEST CONDITIONS STC & NOCT

Model Type	LE144MBF530H		LE144MBF535H		LE144MBF540H		LE144MBF545H		LE144MBF550H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Power Output P _{max} [W]	530	391.88	535	395.57	540	399.28	545W	403.00	550	406.73
Voltage at P _{max} V _{mpp} [V]	41.54	38.35	41.67	38.47	41.80	38.59	41.93	38.71	42.06	38.83
Current at P _{max} I _{mpp} [I]	12.76	10.22	12.84	10.28	12.92	10.35	13.00	10.41	13.08	10.47
Open-circuit Voltage Voc [V]	49.45	46.05	49.58	46.17	49.71	46.30	49.84	46.42	49.97	46.54
Short-circuit Current Isc [I]	13.43	10.86	13.51	10.92	13.59	10.99	13.67	11.05	13.75	11.12
Module Efficiency % [%]	20.52		20.71		20.90		21.10		21.29	

STC : 1000 W/m² irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3 • NOCT : 800 W/m² irradiance, ambient temperature 20°C, wind speed 1 m/sec

BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

		LE144MBF530H	LE144MBF535H	LE144MBF540H	LE144MBF545H	LE144MBF550H
15%	Power Output [W]	610	615	621	627	633
	Module Efficiency [%]	23.63%	23.82%	24.06%	24.29%	24.52%
20%	Power Output [W]	636	642	648	654	660
	Module Efficiency [%]	24.64%	24.87%	25.11%	25.33%	25.57%
25%	Power Output [W]	663	669	675	681	688
	Module Efficiency [%]	25.68%	25.92%	26.15%	26.38%	26.65%
30%	Power Output [W]	689	696	702	709	715
	Module Efficiency [%]	26.69%	26.96%	27.19%	27.47%	27.71%

* The Bifacial gains are dependant on the power plant design and location.

THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	44+/-2
Temperature Coefficient of P _{max}	γ	%/°C	-0.33
Temperature Coefficient of Voc	β	%/°C	-0.27
Temperature Coefficient of Isc	α	%/°C	0.05

OPERATING CONDITIONS

Max. System Voltage	1500VDC
Max. Series Fuse Rating	25A
Operating Temperature Range	-40°C to 85°C
Max. Static Load, Front	5400Pa
Max. Static Load, Back (e.g., wind)	2400Pa
Max. Hailstone Impact (diameter / velocity)	25mm / 23.3 m/s

MECHANICAL DATA

Dimensions (L / W / H)	2278mm / 1133mm / 35mm
Weight	28kg
Front Cover (material / thickness)	AR coated high transmission low iron tempered glass / 3.2 mm
Cell (qty. / material / dim./no. of busbars)	144 / PERC Monocrystalline Silicon/ 182mm x 182mm / MBB
Encapsulate (material)	Ethylene vinyl acetate (EVA)
Backsheet	UV Protected
Frame (material / color)	Anodized aluminum alloy / silver
Junction Box (protection degree)	IP68 Split Junction Box, 3 bypass diodes
Cable (length / cross-sectional area)	400mm / 4mm ²
Plug Connector (type / protection degree)	MC4 / IP68

PACKAGING SPECIFICATIONS

Number of Modules Per Pallet	30
Packaging Box Dimensions (L / W / H)	2331mm / 1140mm / 1351mm
Box Weight	900kg

LINEAR PERFORMANCE WARRANTY

- Product Warranty - 12 Year
- Performance Warranty - 30 Year Linear Power Warranty for with 2% for 1st Year degradation & 0.55% from year 2 to year 30

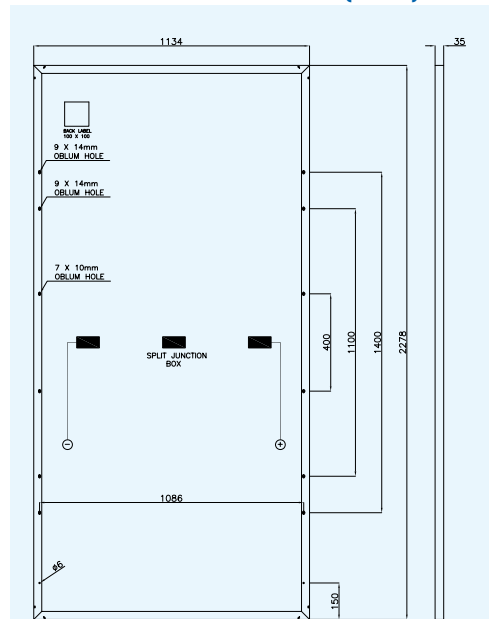


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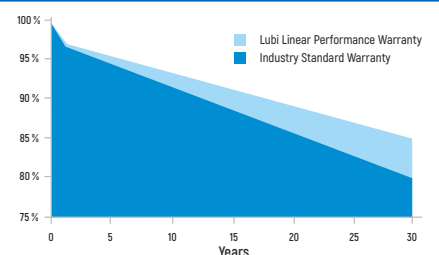
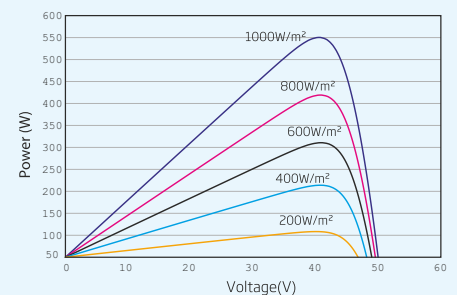
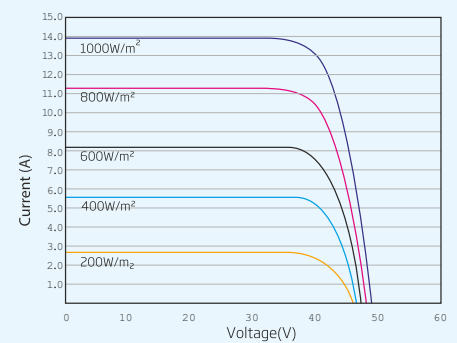
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ENGINEERING DRAWING (±1mm)



ELECTRICAL PERFORMANCE



• The electrical data given here is for reference purpose only.
• Lubi Reserves the right to change the specifications without prior notice.