

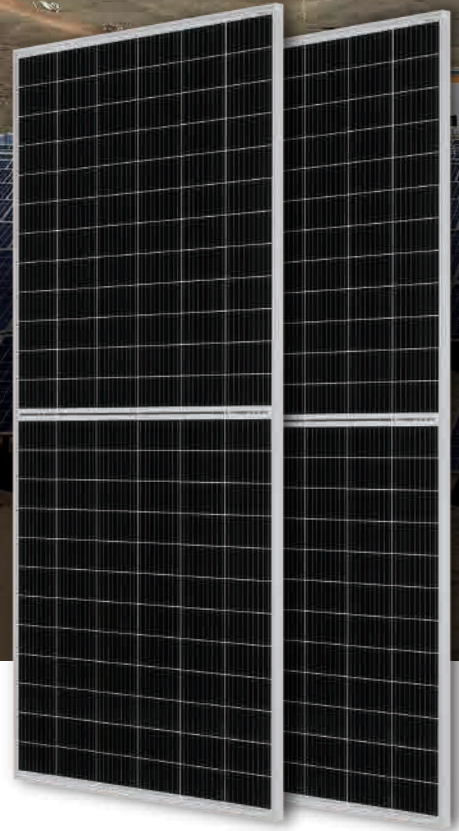
Mono

420W MBB Bifacial Mono PERC Half-cell Double Glass Module

M72D10 400-420/MB Series

Introduction

Assembled with MBB bifacial PERCUM cells and half-cell configuration, these double glass modules have the capability of converting the incident light from the rear side together with the front side into electricity, providing higher output power, lower temperature coefficient, less shading loss, as well as enhanced tolerance for mechanical loading.



Higher output power



More reliable, more stable power generation



Less shading effect

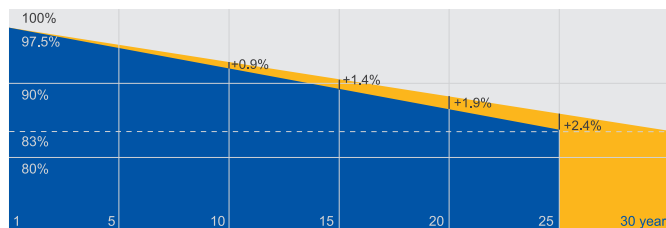


Lower temperature coefficient

Superior Warranty

- 12-year product warranty
- 30-year linear power output warranty

0.5% Annual Degradation Over 30 years

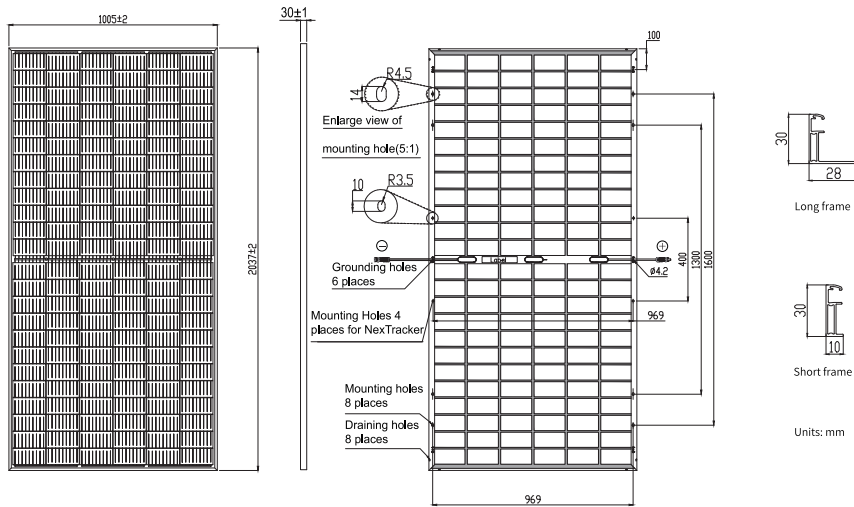


■ Additional Value From 30-Year Warranty ■ Lingtech solar warranty

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
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



MECHANICAL DIAGRAMS


Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	25.0kg±3%
Dimensions	2037±2mm×1005±2mm×30±1mm
Cable Cross Section Size	4mm ²
No. of cells	144(6×24)
Junction Box	IP68, 3 diodes
Connector	QC 4.10-35
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1200mm(+)/1200mm(-)
Packaging Configuration	34 Per Pallet
Front Glass/Back Glass	2.0mm/2.0mm

ELECTRICAL PARAMETERS AT STC

TYPE	M72D10 -400/MB	M72D10 -405/MB	M72D10 -410/MB	M72D10 -415/MB	M72D10 -420/MB
Rated Maximum Power(Pmax) [W]	400	405	410	415	420
Open Circuit Voltage(Voc) [V]	49.57	49.82	50.08	50.35	50.62
Maximum Power Voltage(Vmp) [V]	42.02	42.28	42.54	42.80	43.04
Short Circuit Current(Isc) [A]	10.14	10.20	10.26	10.32	10.37
Maximum Power Current(Imp) [A]	9.52	9.58	9.64	9.70	9.76
Module Efficiency [%]	19.5	19.8	20.0	20.3	20.5
Power Tolerance	0~+5W				
Temperature Coefficient of Isc(α_{Isc})	+0.044%/°C				
Temperature Coefficient of Voc(β_{Voc})	-0.272%/°C				
Temperature Coefficient of Pmax(γ_{Pmp})	-0.354%/°C				
STC	Irradiance 1000W/m ² , 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.

**Bifaciality=Pmax,rear/Rated Pmax,front

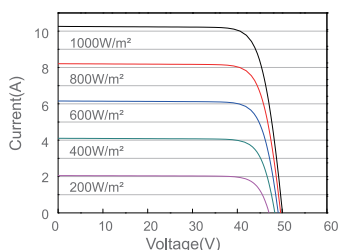
ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN(REFRENE TO 410W FRONT)
OPERATING CONDITIONS

Backside Power Gain	5%	10%	15%	20%	25%	Maximum System Voltage	1500V DC(IEC)
Rated Max Power(Pmax) [W]	431	451	472	492	513	Operating Temperature	-40°C~+85°C
Open Circuit Voltage(Voc) [V]	50.10	50.10	50.10	50.20	50.20	Maximum Series Fuse	20A
Max Power Voltage(Vmp) [V]	42.55	42.55	42.55	42.65	42.65	Maximum Static Load,Front*	5400Pa
Short Circuit Current(Isc) [A]	10.76	11.28	11.79	12.30	12.81	Maximum Static Load,Back*	2400Pa
Max Power Current(Imp) [A]	10.12	10.60	11.08	11.54	12.02	NOCT	45±2°C
						Bifaciality**	70%±10%

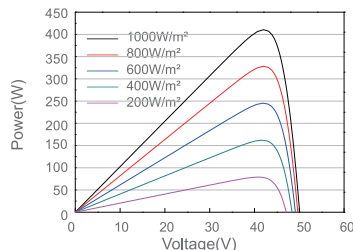
*For NexTracker installations static loading performance: front load measures 2400Pa, while back load measures 1800Pa.

CHARACTERISTICS

Current-Voltage Curve M72D10-410/MB



Power-Voltage Curve M72D10-410/MB



Current-Voltage Curve M72D10-410/MB

