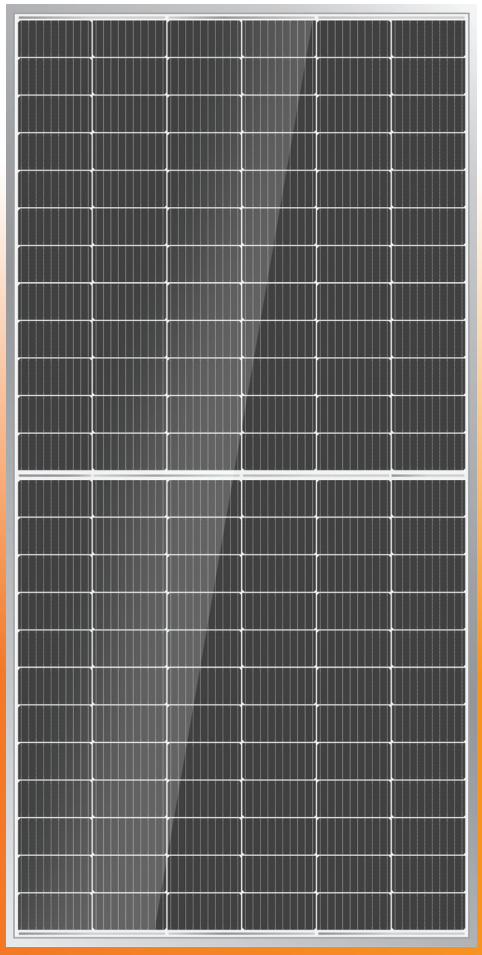
INOX SOLAR

M10R N-Type TOPCon Module Datasheet

ISL144NM10R

570-595W
144 Half-Cut Cells



Certifications

12-Year Material Warranty

30-Year Linear Power Warranty

595W	23%	0~+5W	UPTO 80%
MAXIMUM POWER OUTPUT	MAXIMUM EFFICIENCY	POSITIVE POWER TOLERANCE	BIFACIALITY FACTOR

HIGHLIGHTS

Up to 30% More Power Output
Delivers significantly higher energy yield compared to conventional P-type modules.

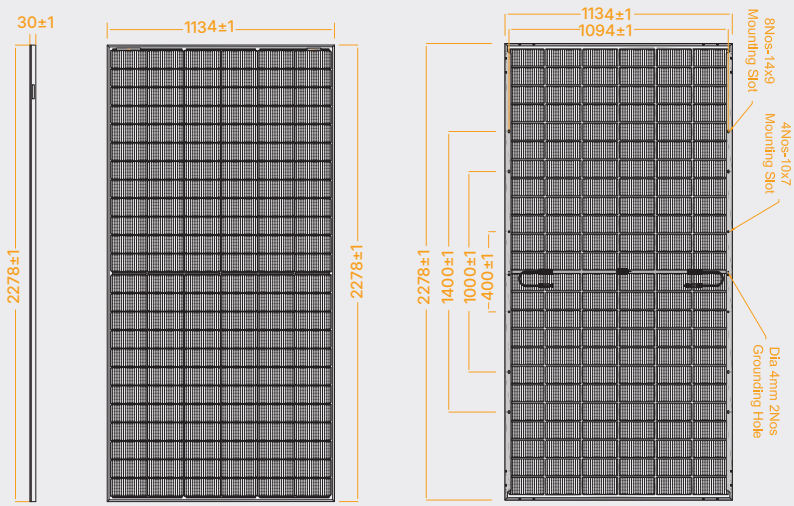
Superior Low-Light Performance
Generates more power even in low-irradiance conditions such as cloudy or foggy weather.

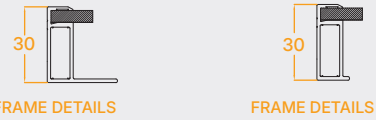
Enhanced Temperature Tolerance
Maintains high power output even in high ambient temperatures, thanks to a better temperature coefficient.

Near Zero LID (Light-Induced Degradation)
Ensures consistently high energy generation without initial power loss.

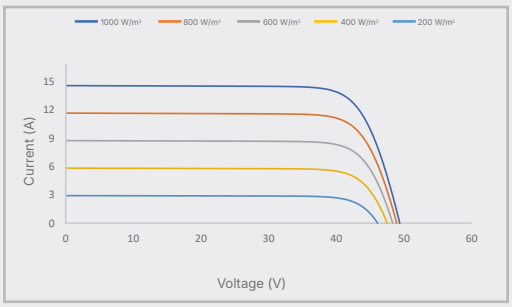
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DIMENSIONS OF PV MODULE(MM)

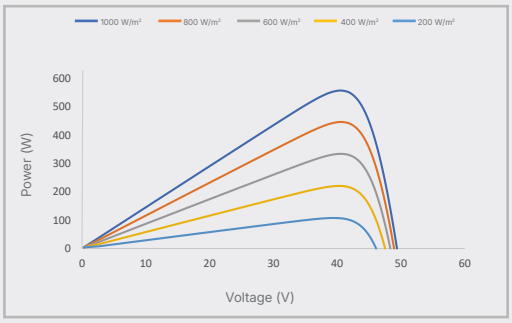




IV CURVE



PV CURVE

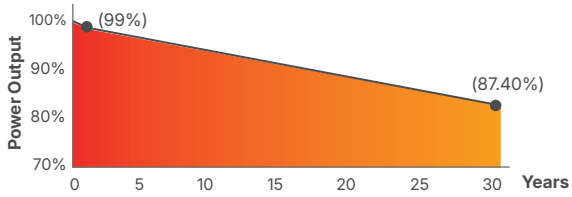


ELECTRICAL PARAMETERS

Module Type	ISL NM10R 570		ISL NM10R 575		ISL NM10R 580		ISL NM10R 585		ISL NM10R 590		ISL NM10R 595	
Power Tolerance - P_{MAX} (W)	0 - +5w											
Parameters	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	570.00	431.00	575.00	435.00	580.00	438.00	585.00	441.00	590.00	447.00	595.00	450.00
Open Circuit Voltage (Voc)	51.16	48.32	51.29	48.44	51.42	48.53	51.55	48.64	51.68	48.80	51.81	48.92
Short Circuit Current (Isc)	14.16	11.42	14.24	11.48	14.32	11.55	14.4	11.61	14.48	11.68	14.56	11.74
Maximum Power Voltage (Vmp)	42.44	39.83	42.56	39.95	42.68	40.21	42.79	40.30	42.91	40.34	43.03	40.42
Maximum Power Current (Imp)	13.44	10.83	13.52	10.89	13.59	10.89	13.68	10.95	13.76	11.08	13.82	11.14
Module Efficiency –nm(%)	22.1		22.3		22.5		22.6		22.8		23.0	

STC: Irradiance: 1000w/m², Cell Temperature : 25°C, Atmospheric=1.5 | NOCT: Irradiance: 800w/m², Cell Temperature: 45°±2C, Atmospheric = 1.5, Wind speed: 1m/s

30-YEAR LINEAR POWER WARRANTY



OPERATION PARAMETERS

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	30A
Power Tolerance	0~+5W
Nominal Operating Cell Temperature(NOCT)	42°C ± 2°C
Safety Class	Class II
Refer. Bifacial Factor	80 ± 10%

SPECIFICATIONS

Cells Type	TOPCon, 16BB
No. of cells & Matrix	144 [(12×6)x2]
Module Dimensions [mm]	2278(L) x 1134(W) x 30(T)
Weight	31.4 kg
Front Glass Thickness	2 mm
Rear Glass Thickness	2 mm
Junction Box & Cable Length	IP68, 300/400mm

LOAD CAPACITY

Maximum Load Front (pa)	5400
Maximum Load Rear (pa)	2400
Through Hail Testing	25mm diameter, Impact Speed 23m/s

TEMPERATURE COEFFICIENT (STC TEST)

Temperature Coefficient of P_{MAX}	-0.28%/°C
Temperature Coefficient of V_{OC}	-0.17%/°C
Temperature Coefficient of I_{SC}	+0.04%/°C

WARRANTY

- 12-Year Material Warranty
- 30-Year Linear Power Warranty
- 1% First Year Degradation
- 0.40% Annual Power Attenuation

PACKING CONFIGURATION

- Container Capacity 40' HC
- Modules Per Pallet: 36 Pieces
- Pallets Per Container: 20 Pallets
- Total Modules Per Container: 720 Pieces

CAUTION:
READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Document Number: DS/ISL144NM10R/01

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