

BIFACIAL N-TYPE MONO CRYSTALLINE HALF CUT MODULE – DOUBLE GLASS

410 / 415 / 420 / 425 / 430 / 435 / 440 Watts

Lynx Series



Overview

N-type solar cells (TOPCon) are seen as the technology of the future. N-type (TopCon) technology guarantees high performance and low degradation of the PV module, substantially improving the results and the yield in the time. "Lynx" Series module is the ideal solution for end users who want a Quality PV & reliable product over time and a fast turnaround on their investments.

Key Benefits

	Zero light induced Degradation		30 Years Limited Product Warranty
	Higher yield per surface area		Low Pmax Temperature Coefficient
	Low LCOE		Higher Light Conversion



Guaranteed mechanical resistance to severe weather conditions



Positive Tolerance

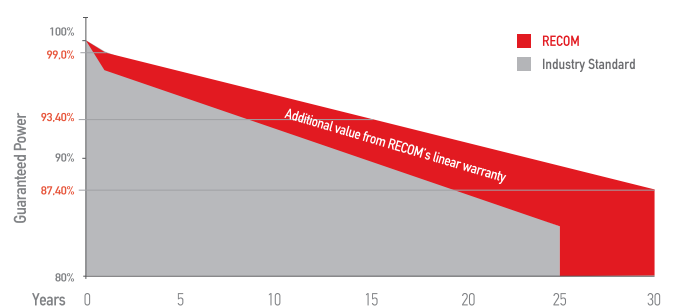


100 % electro-luminescence tested

Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730
Factory Quality Tests	ISO 9001: 2015, ISO 14001: 2015
Certifications	Conformity to CE, PV CYCLE Fire safety Class C according to UL790
Insurance	Third party liability insurance provided by Liberty Mutual
Wind and Snow Loads Testing	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Withstanding Hail	Maximum Diameter of 25 mm with impact speed of 23 m/s
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	30-year limited product warranty 15-year manufacturer warranty on 93.40% of the nominal performance 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output	≥ 99.0%	2-30 Year Decline	≤ 0.40%	30 Year Output	≥ 87.40%
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Electrical Characteristics

POWER CLASS ⁽¹⁾			410		415		420		425		430		435		440	
Testing Condition			STC ⁽²⁾ NMOT ⁽³⁾		STC NMOT		STC NMOT		STC NMOT		STC NMOT		STC NMOT		STC NMOT	
Maximum Power	Pmax	[Wp]	410	308	415	312	420	316	425	320	430	323	435	327	440	331
Maximum Power Voltage	Vmp	[V]	31,13	29,06	31,32	29,20	31,51	29,34	31,70	29,50	31,88	29,63	32,07	29,79	32,26	29,95
Maximum Power Current	Imp	[A]	13,17	10,61	13,25	10,69	13,33	10,76	13,41	10,83	13,49	10,91	13,57	10,98	13,64	11,05
Open Circuit Voltage	Voc	[V]	37,73	35,84	37,92	36,02	38,11	36,20	38,30	36,38	38,49	36,56	38,67	36,74	38,85	36,93
Short Circuit Current	Isc	[A]	13,94	11,23	13,99	11,30	14,07	11,36	14,15	11,42	14,23	11,49	14,31	11,55	14,38	11,62
Module Efficiency	Eff	[%]	21,00		21,25		21,51		21,77		22,02		22,28		22,54	
Maximum Series Fuse	IR	[A]	30													
Maximum System Voltage	Vsys	[V]	1500V DC (IEC)													

(1) Measurement Tolerances: P_{max} (± 3%), I_{sc} & V_{oc} (± 3%) - Power Classification 0/+5W

(2) STC (Standard Testing Condition): Irradiance 1000W/m², Cell Temperature 25°C, AM 1.5

(3) NMOT (Nominal Operating Module Temperature): Irradiance 800W/m², NMOT, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Bi Facial Output (4)

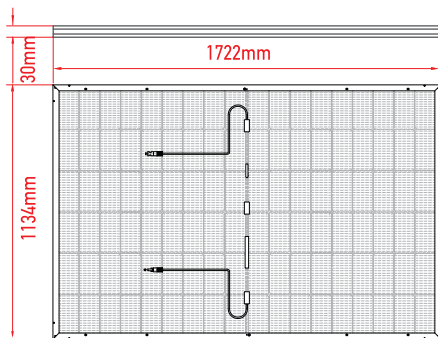
POWER CLASS		410		415		420		425		430		435		440	
		P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]
Power with Backside Gain	+5 [%]	430,5	22,0%	435,8	22,3%	441,0	22,6%	446,3	22,9%	451,5	23,1%	456,8	23,4%	462,0	23,7%
	+10 [%]	451,0	23,1%	456,5	23,4%	462,0	23,7%	467,5	23,9%	473,0	24,2%	478,5	24,5%	484,0	24,8%
	+15 [%]	471,5	24,1%	477,3	24,4%	483,0	24,7%	488,8	25,0%	494,5	25,3%	500,3	25,6%	506,0	25,9%
	+20 [%]	492,0	25,2%	498,0	25,5%	504,0	25,8%	510,0	26,1%	516,0	26,4%	522,0	26,7%	528,0	27,0%
	+25 [%]	512,5	26,2%	518,8	26,6%	525,0	26,9%	531,3	27,2%	537,5	27,5%	543,8	27,8%	550,0	28,2%
	+30 [%]	533,0	27,3%	539,5	27,6%	546,0	28,0%	552,5	28,3%	559,0	28,6%	565,5	29,0%	572,0	29,3%

(4) Bifaciality Factor > 80% - Back-side power gain depends upon the specific project albedo - Efficiency is according to the surface of the module

Mechanical Data

Dimensions	1722 mm x 1134 mm x 30 mm
Weight	24,7 Kg
Cell Type	N-type - 182mm x 91mm (2 x 54 Pcs) - M10
Front Glass	2.0 mm Tempered and low iron glass + ARC
Rear Side	2.0 mm Tempered and low iron glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass diodes
Connector	MC4 compatible
Output cable	4mm ² - Length: = 350mm or can be customized

Dimensions

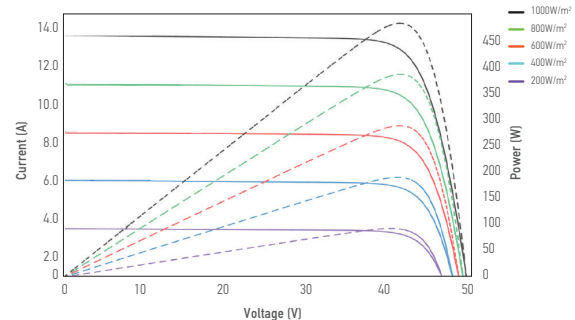


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I-V Curve

The module relative power loss at low light irradiance of 200W/m² is less than 3%.



Temperature Characteristics

P _{max} Temperature Coefficient	-0.290% / °C
V _{oc} Temperature Coefficient	-0.250% / °C
I _{sc} Temperature Coefficient	+0.045% / °C
Operating Temperature	-40~+85 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

Container	40'HC
Pieces per Pallet	37
Pallets per Container	26
Pieces per Container	(37+37)x13=962 pcs

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