

# Luxra®

PURE  
ENERGY

THE PREMIUM  
CLASS WITH  
ELEGANT  
DESIGN IN  
BLACK



## HIGHEST DURABILITY

Heavy Duty, certified for heavy snow and wind load, hail resistance, and maximum static load.



## N-TYPE MBB HALF CUT TECHNOLOGY

Enhanced energy density and up to 25% extra power with high bifacial factor.



## ANTI-LID

Boron-oxide-free composite LID N-type cells increase module power generation.



## TOP PERFORMANCE & LOW DEGRADATION

<1.0% power degradation in the first year, <0.40% annually from year 2 to 30.

## LUXRA® PURE HD MODULES

# THE SMART SOLAR MODULE WITH FULL PERFORMANCE EVEN IN EXTREME WEATHER CONDITIONS



Inherent defect coverage for certified panels with inline-quality inspection



Performance Guarantee  
30 years of linear power output warranty



Product Warranty  
12 years limited warranty on product quality



[WWW.LUXRA.CH](http://WWW.LUXRA.CH)

**22.52%**

MODULE EFFICIENCY

**0-3%**

POWER TOLERANCE

**<1.0%**

FIRST YEAR POWER DEGRADATION

**<0.4%**

YEAR 2-30 POWER DEGRADATION

**INNOVATION SMBB & HALF CUT CELLS**

LOWER OPERATION TEMPERATURE

**ELECTRICAL DATA AT STC\***

		LX-450	LX-455
Peak Power (Pmax)**	(W)	450	455
Maximum Power Voltage (Vmp)	(V)	29,14	29,29
Maximum Power Current (Imp)	(A)	15,45	15,54
Open-circuit Voltage (Voc)	(V)	35,14	35,29
Short-circuit Current (Isc)	(A)	16,01	16,12
Module Efficiency	(%)	22,52	22,77
Operating Temperature		- 40° ~ + 85° C	- 40° ~ + 85° C
Maximum System Voltage		1500V	1500V
Maximum Series Fuse Rating		25A	25A
Power Tolerance		0~+3%	0~+3%

\*STC (Standard Test Condition): Irradiance 1000W/ m2, Module Temperature 25° C, AM 1.5  
\*\* On request also available in Peak Power modules of 435 W - 450 W in 5 W steps

**ELECTRICAL DATA AT NMOT\***

		LX-450	LX-455
Peak Power (Pmax)	(W)	339	343
Maximum Power Voltage (Vmp)	(V)	27,44	27,59
Maximum Power Current (Imp)	(A)	12,36	12,44
Open-circuit Voltage (Voc)	(V)	33,37	33,52
Short-circuit Current (Isc)	(A)	13,11	13,21

\*NMOT (Under Nominal Module Operating Temperature), Irradiance of 800W/ m2, Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

**BIFACIAL POWER GENERATION PARAMETERS (BACKSIDE GAINS)**

			LX-450	LX-455
5%	Maximum Power (Pmax)	(W)	473	478
	Module Efficiency	(%)	23,65	23,91
15%	Maximum Power (Pmax)	(W)	518	523
	Module Efficiency	(%)	25,9	26,19
25%	Maximum Power (Pmax)	(W)	563	569
	Module Efficiency	(%)	28,15	28,46

**TEMPERATURE CHARACTERISTICS**

	LX-450 / LX-455
Temperature coefficient of Pmax	- 0,300%/° C
Temperature coefficient of Voc	- 0,250%/° C
Temperature coefficient of Isc	0,046%/° C
NMOT	41 ± 3° C

**MECHANICAL DATA**

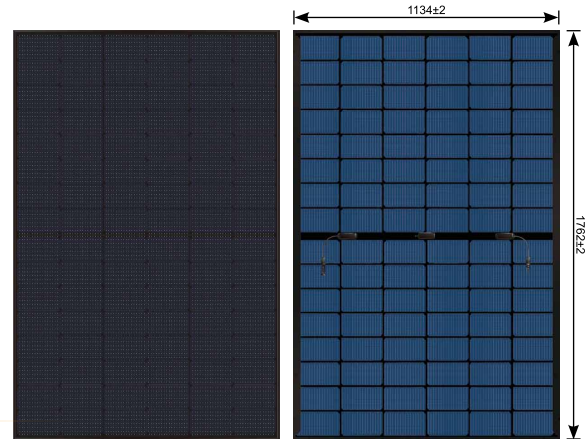
	LX-450 / LX-455
Mechanical Test Load	Higher reliability on test loads, 9000Pa snow load, 4000Pa wind load
Cell Type	Mono-Crystalline N-TYPE TOPCon
Cell Arrangement	96pcs (6x16)
Dimensions (LxWxH)	1762 x 1134 x 35 mm
Weight	24,5 kg
Glass	2.0 mm high transmittance, reinforced glass
Backsheet	2.0 mm part of the structure is grid-like black glass
Frame	Anodized aluminium alloy with Black coating
Junction Box	IP68
Cable Type	4.0 mm <sup>2</sup>
Length of Cable	1200 mm
Connector	Original MC4 Stäubli Evo 2 connectors

**PACKAGING**

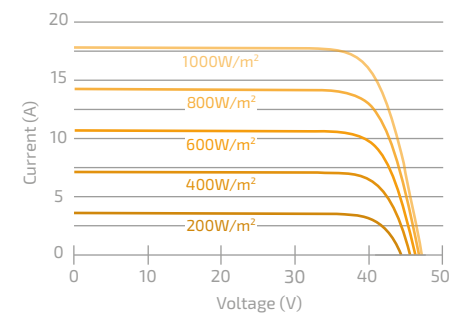
	LX-450 / LX-455
Packing Type	40 ft HQ
Piece/ Pallet	31
Piece/ Container	806

**WARRANTY**

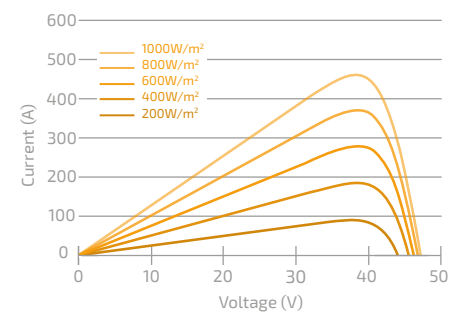
	LX-450 / LX-455
Product Material & Workmanship	12 years
Linear Performance Warranty	30 years 87,4%
Linear attenuation per year within 30 years	0,40%



**CURRENT-VOLTAGE CURVE (455W)**



**POWER-VOLTAGE CURVE (455W)**



**LINEAR PERFORMANCE WARRANTY**

