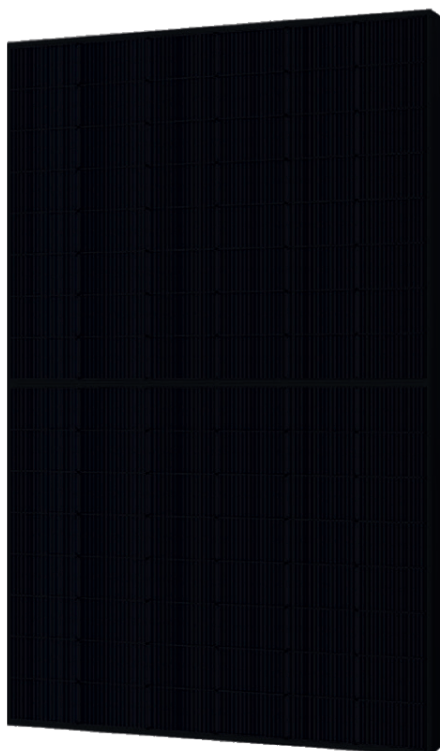


JLSDG108RGxxxW
490 - 505
 FullBlack - **Bifacial**

0~+3W Positive power tolerance | **22,72%** Maximum efficiency



JNL SOLAR, A HIGH-QUALITY MODULE THROUGH ITS HIGH PERFORMANCE CONSTRUCTION

Leveraging our expertise in solar technology and commitment to ongoing innovation, JNL Solar is proud to introduce the OptimaX+ Black Frame module. This module benefits from our advanced manufacturing process, ensuring optimal quality at every stage, from assembly to the finished product. The OptimaX Black Frame incorporates bifacial technology with a double-glass design, providing exceptional durability and performance. Its all-black aesthetic makes it the ideal choice for installations where design is paramount. Designed to be versatile and durable, this module guarantees energy efficiency above 22.72%, with excellent low-light performance, ready to excel in all conditions.



A sleek, elegant design that blends in perfectly with the roof - an all-black photovoltaic module from cell to frame.



Efficient & Low-Maintenance: Our JNL module boosts energy with over 80% bifaciality and self-cleaning glass



Guaranteed Performance: Our modules maintain up to 89.4% energy output for 25 years and 87.4% for 30 years.



High Reliability and Efficiency: N-type components with reduced LID/LETID attenuation, 22.72% efficiency, and improved low-light performance.



High conversion efficiency thanks to high-quality modules and advanced cell technology.



Enhanced PID Resistance and Protection: Our rigorous production process minimizes PID risk and protects against hotspots, with a power tolerance of 0 to +3%.



Ideal for private or commercial installations. High power output reduces installation costs.



High reliability thanks to rigorous quality control. More than 30 in-house tests (UV, HF, and many others). Our tests go beyond certification requirements.

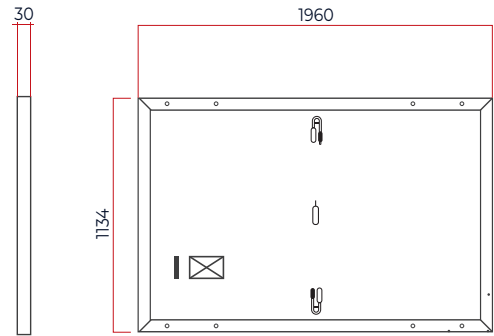


Our panels are tested and certified to withstand extreme environmental conditions: wind loads (2400 Pa) and snow loads (5400 Pa).

MECANICAL DATA

Dimensions	1960x1134x30mm (with frame)
Weight	26.6kg
Cells	108 cells, N type Mono-Crystalline, 182.2mm×105mm
Glass	Avant : 2.0mm Anti-Reflection Coating 2.0mm Heat Strengthened Glass
Junction box	P68, 3 bypass diodes
Cable	4mm², longueurs symétriques 1100mm
Connector	MC4 Compatible IP68
Number of cells	108 cells (Half-Cell)

DIMENSIONS



ELECTRICAL DATA (parameters at standard test conditions)

		490W		495W		500W		505W	
TYPICAL TYPE		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Max Power	P _{max}	490	370	495	374	500	378.1	505	382.2
Max Power Voltage	V _{mp}	32.91	30.9	33.14	31.1	33.38	31.4	33.5	31.6
Max Power Current	I _{mp}	14.89	11.97	14.94	12.01	14.98	12.04	15.03	12.08
Open Circuit Voltage	V _{oc}	39.49	37.4	39.75	37.6	40.01	37.9	40.24	38.1
Short Circuit Current	I _{sc}	15.75	12.68	15.79	12.72	15.83	12.75	15.88	12.79
Module Efficiency	%	22.05%	22.05%	22.27%	22.27%	22.50%	22.5%	22.72%	22.72%
Power Tolerance		0~+5W							
Max System Voltage		DC 1500V (TUV) / 1500V (UL)							
Maximum Series Fuse Rating		30A							

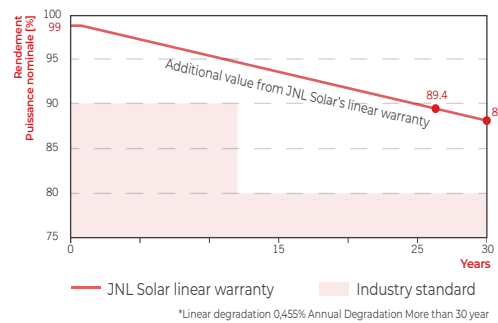
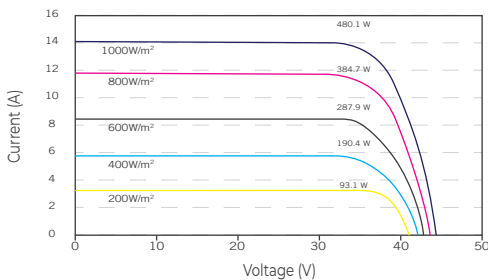
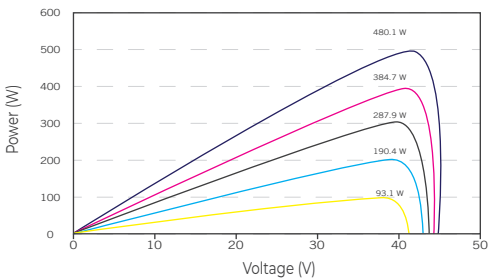
STC (Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m², Cells Temperature25)

NMOT (Irradiance 800W/m², Ambient Temperature 20,AM1.5,Wind Speed 1m/s)

ELECTRICAL CHARACTERISTICS with 15% Rear Side Power Gain

Max Power	P _{max}	563.5	569.25	575	580.75
Max Power Voltage	V _{mp}	32.91	33.14	33.38	33.60
Max Power Current	I _{mp}	17.12	17.18	17.23	17.28
Open Circuit Voltage	V _{oc}	39.49	39.75	40.01	40.24
Short Circuit Current	I _{sc}	18.11	18.16	18.20	18.26

CARACTÉRISTIQUES À DIFFÉRENTES INTENSITÉS



TEMPERATURE RATINGS

Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.30%/°C
Operational Temperature	-40±85°C
NOCT (Nominal Operating Cell Temperature)	45±2°C

PACKAGING CONFIGURATION

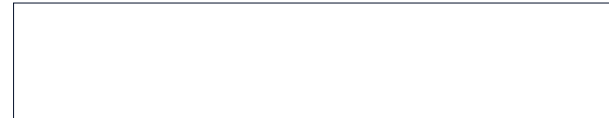
Container	40 HQ
Quantity / pallet	37 pieces
Pallets / container	24 pieces
Quantity / container	888 pieces

CERTIFICATIONS



IEC 61215-1:2021 / IEC 61215-1-1:2021 / IEC 61215-2:2021
IEC 61730-1:2023 / IEC 61730-2:2023

AUTHORIZED DEALER



CAUTION: Read the instructions for safety installations before using the product JNLSolar (All rights reserved) © 2024. Specifications included in this data sheet are subject to change without notice