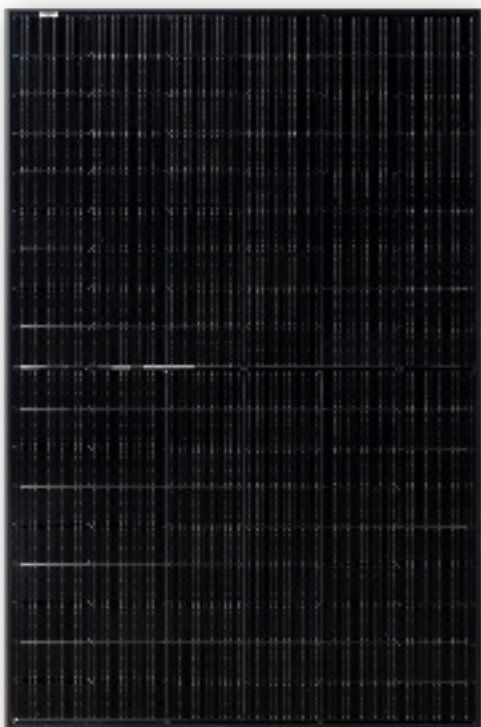


**JLSDG440N-108M10**  
**410 - 440**
**Mono N-Type | Bifacial**  
*Transparent*
**0~+5W** Positive power tolerance | **22,53%** Maximum efficiency

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

Drawing on our expertise in solar technologies and a culture of innovation, JNL Solar presents the OptimaX 440Wc with a black frame. Manufactured entirely in our facilities, this module guarantees unmatched quality at each stage. The 440Wc integrates bifacial technology and a double-glass design, offering enhanced durability and optimized performance. Its transparent backsheet maximizes light capture, making it ideal for installations focused on performance above all. This versatile module is designed for lasting performance in a wide variety of applications.



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



Extra efficiency and easy maintenance thanks to highly transparent auto-cleaning glass.



Durable safety and guaranteed top performance. 30-year performance guarantee and 25-year product guarantee.



The **N-Type** combines superior reliability with reduced LID/LETID attenuation.



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



PID resistance and protection against hotspots verified and rigorous production process.



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.

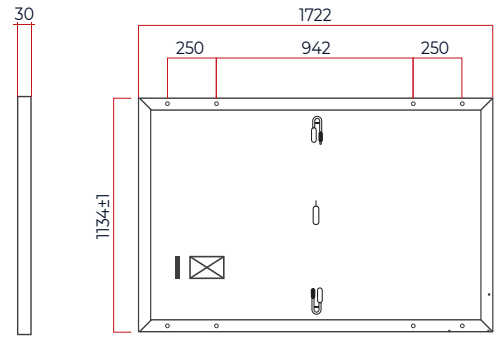


Our panels are tested and certified to withstand extreme environmental conditions: wind loads (2400 Pa) and snow loads (5400 Pa).



## MECHANICAL DATA

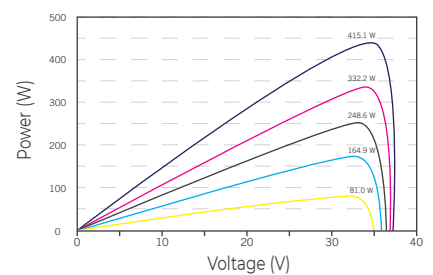
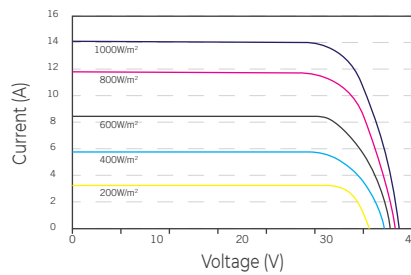
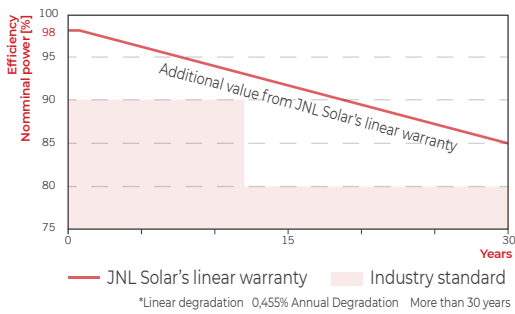
Dimensions	1722 mm x 1134mm x 30mm (with frame)
Weight	23,3 kg ±3%
Cells	N type Mono-Crystalline, 16BB, 182x91 mm
Glass	Front: 2.0 mm High Transmission, AR Coated Heat Strengthened Glass Back: 2.0 mm High Transmission, AR Coated Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction box	IP68
Cable	4mm <sup>2</sup> , 1100mm
Connector	MC4 Compatible IP68
Number of cells	108 cells (Half-Cell)



## ELECTRICAL DATA

TYPICAL TYPE		415	420	425	430	440
Max Power	$P_{max}$	415	420	425	430	440
Max Power Voltage	$V_{mp}$	31,37	31,49	31,64	31,79	32,09
Max Power Current	$I_{mp}$	13,23	13,34	13,44	13,53	13,72
Open Circuit Voltage	$V_{oc}$	38,04	38,13	38,24	38,34	38,53
Short Circuit Current	$I_{sc}$	13,96	14,07	14,16	14,25	14,43
Module Efficiency	%	21,25%	21,51%	21,76%	22,02%	22,53%
Power Tolerance		0~+5W				
Max System Voltage		DC 1500V (TUV) / 1500V (UL)				
Maximum Series Fuse Rating		30A				

STC : Irradiance 1000W/m<sup>2</sup>, 25°C, AM 1.5



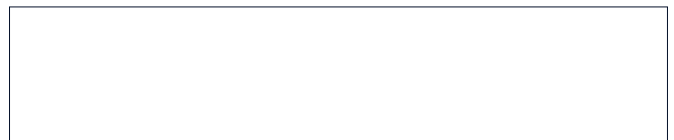
## TEMPERATURE RATINGS

Temperature Coefficient of Isc	0.045%/°C	Operational Temperature	-40±85°C
Temperature Coefficient of Voc	-0.25%/°C	NOCT (Nominal Operating Cell Temperature)	42±2°C
Temperature Coefficient of Pmax	-0.30%/°C		

## PACKAGING CONFIGURATION

Container	40 HQ
Quantity / pallet	36 pieces
Pallets / container	26 pieces
Quantity / container	936 pieces

## AUTHORIZED DEALER



## CERTIFICATIONS



IEC 61215-1:2016 - IEC 61215-1:2016 - IEC 61215-2:2016 - IEC 61730-1:2016 - IEC 61730-2:2016 - EN 61215-1:2016 - EN 61215-1:2016 - EN 61215-2:2017 - EN IEC 61730-1:2018 - EN IEC 61730-1:2018/AC:2018-06 - EN IEC 61730-2:2018 - EN IEC 61730-2:2018/AC:2018-06

CAUTION: Read the instructions for safety installations before using the product JNLSolar (All rights reserved) © 2023. Specifications included in this data sheet are subject to change without notice