

QN-60-18X(NLm)

Lightweight and Flexible Mono-Crystalline

440~460W

0~+5W POWER TOLERANCE

High Efficiency, Low LID

Half-cell TOPCon Technology

120

HALF-Cell
CELLS

182
x91
mm

SQUARE
CELLS

12 years material warranty



30 years power linear warranty



Quick installation

through 'Quick-Bonding' technology eliminates traditional mounting systems, resulting in reduced installation costs.

Safety

Integrated with the roof installation surface to ensure waterproof performance and safety of the roof.

Ultra-lightweight

This module weighs only 6.3 kg, reducing weight by up to 70% compared to conventional glass modules.

Flexibility

The biggest advantage of flexible PV modules is their ability to bend, allowing them to adapt to a wider range of applications.

A sound quality management system and product certification

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality management system

ISO14001:2015: Environmental management system

ISO45001:2018: Occupational health and safety management system



FLEXIBILITY

440~460W

21.1%

MAXIMUM CONVERSION

0~+5W

POWER TOLERANCE

0.4%

0.4% PER YEAR OVER 30 YEARS

Half-Cell Module

LOWER TEMPERATURE COEFFICIENT

Specification

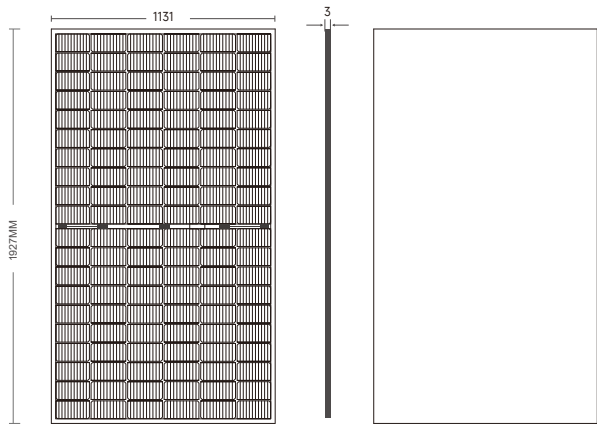
Cell Type	Mono-Crystalline 182x91mm
No. of Cells	120(6 x 20) pcs
Dimension	1927mmx1131mm x3 mm
Weight	6.3±0.5kg
Connector	MC4/MC4 Compatible
Frame	Frameless Design
Junction Box	IP68
Cable Length	4mm2 (UL/IEC) length: 400mm (+, -) /or customizable

Packing Standard

40'HQ container

58pcs/pallet, 22pallets/ctns, 1276pcs/ctn

Mechanical Diagrams



Length: ±2mm Width: ±2mm Thickness: ±0.1mm

Electrical Parameters At STC

Module Type	QN-60-18X(NLm)-440	QN-60-18X(NLm)-445	QN-60-18X(NLm)-450	QN-60-18X(NLm)-455	QN-60-18X(NLm)-460
Peak Power-Pmax	440W	445W	450W	455W	460W
Open Circuit Voltage-Voc	41.03V	41.18V	41.33V	41.48V	41.63V
Short Circuit Current-Isc	13.76A	13.83A	13.90A	13.97A	14.04A
Maximum Power Voltage-Vmp	34.48V	34.63V	34.78V	34.93V	35.08V
Maximum Power Current-mp	12.76A	12.85A	12.93A	13.02A	13.11A
Module Efficiency - nm	20.2%	20.4%	20.6%	20.8%	21.1%

Electrical Parameters At NMOT

Maximum Power-Pmax	329W	333W	337W	340W	344W
Open Circuit Voltage-Voc	48.4V	48.48V	48.59V	48.69V	48.78V
Short Circuit Current-Isc	8.75A	8.83A	8.91A	9.00A	9.09A
Maximum Power Voltage-Vmp	40.10V	40.24V	40.33V	40.41V	40.50V
Maximum Power Current-Imp	8.21A	8.27A	8.35A	8.42A	8.49A

Operating Parameters

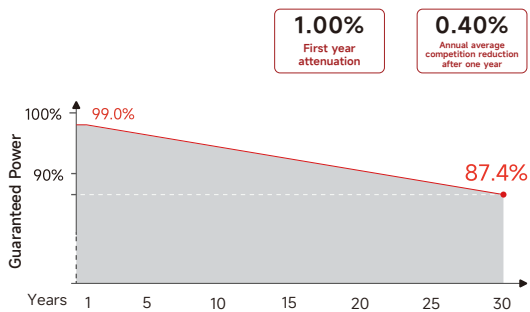
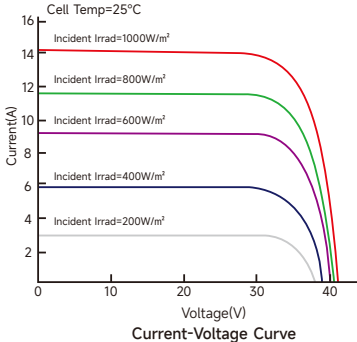
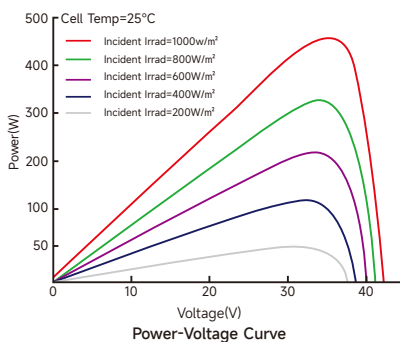
Maximum System Voltage	1500V DC (UL/IEC)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Operational Temperature	-45°C~+85°C
Safety Class	Class A+

Temperature Coefficient (STC Test)

Temperature Coefficient of Isc	+0.046%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.31%/°C

Product Features

High Efficiency, Low LID, Half-cell TOPCon Technology



STC: Irradiance:1000W/m² | Battery temperature: 25°C | Atmospheric=1.5

NOCT: Irradiance:800W/m² | Ambien temperature: 20°C | Atmospheric=1.5 | Wind speed 1m/s

D5 Greenland Window Building
Nonghua Road
Yuhuatai District, Nanjing, China
www.q-sunsolar.com

