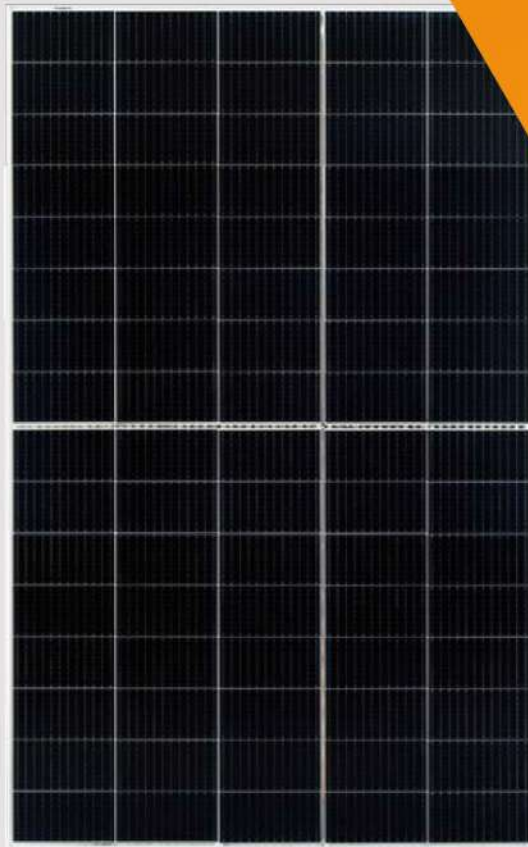




NPV80-9-420BN

- **80 CELL**
MonoNPV Type
- **1500VDC**
Maximum System Voltage
- **405-420Wp**
Power Output Range
- **21.8%**
Maximum Efficiency



KEY SALIENT FEATURES



Global, bankable brand, with independently certified state-of-the-art automated manufacturing



Industry leading lowest thermal co-efficient of power



Industry leading 12 years product warranty



Excellent low irradiance performance



Excellent PID resistance



Positive power tolerance of 0~+3%



Dual stage 100% EL Inspection warranting defect-free product



Module Imp binning radically reduces string mismatch losses



Excellent wind load 2400Pa & snow load 5400Pa under certain installation method



Comprehensive product and system certification

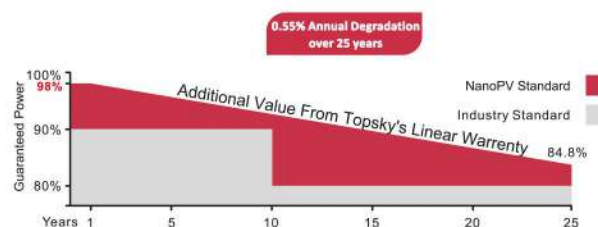
- IEC61215:2016; IEC61730-1/-2:2016;
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- ISO 45001:2018 Occupational Health and Safety Management System

HIGH PERFORMANCE N-TYPE

NPV TYPE MONOCRYSTALLINE MODULE

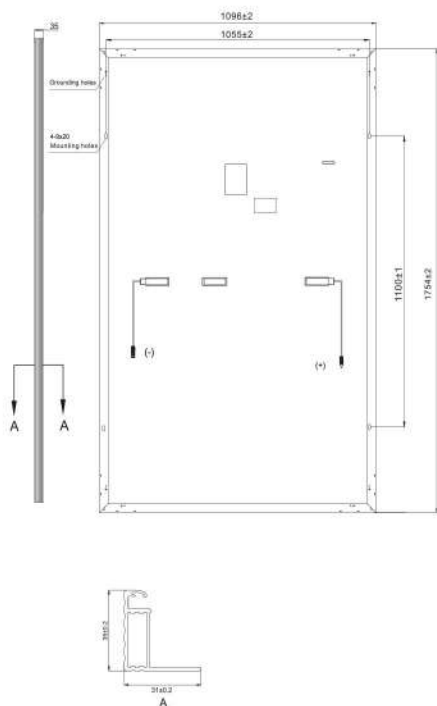
LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 25 year Linear Power Warranty



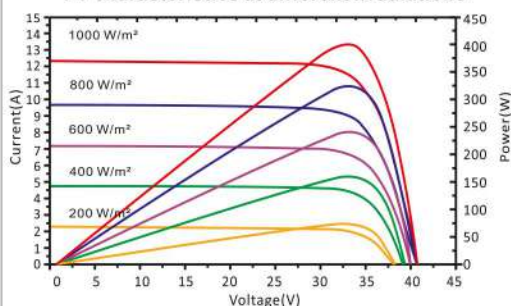
★ Please check the valid version of Limited Product Warranty which is officially released by NanoPV

Dimensions of PV Module Unit: mm



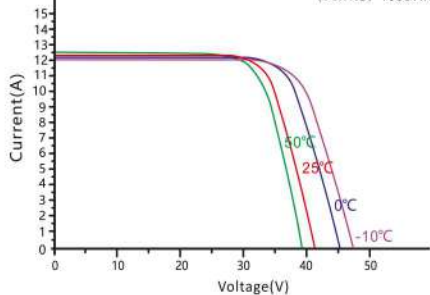
NPV809-405BN

I-V characteristics at different irradiances



I-V characteristics at different temperatures

(AM1.5, 1000W/m²)



Contact US:

NanoPV Solar Inc.,

320 Tripp Street,
Americus, Sumter County,
GA-31709 USA

Email: info@nano-pv.com

Website: www.nano-pv.com

ELECTRICAL DATA (STC)

Model Number	NPV80-9-405BN	NPV80-9-410BN	NPV80-9-415BN	NPV80-9-420BN
Rated Power in Watts-Pmax(Wp)	405	410	415	420
Open Circuit Voltage-Voc(V)	28.82	28.93	29.05	29.16
Short Circuit Current-Isc(A)	17.97	18.08	18.20	18.31
Maximum Power Voltage-Vmpp(V)	23.86	23.99	24.12	24.25
Maximum Power Current-Imp(A)	16.97	17.08	17.20	17.33
Module Efficiency (%) *	21.1	21.3	21.6	21.8

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

* Module Efficiency (%): Round-off to the nearest number

ELECTRICAL DATA (NMOT)

Model Number	NPV80-9-405BN	NPV80-9-410BN	NPV80-9-415BN	NPV80-9-420BN
Rated Power in Watts-Pmax(Wp)	306.5	310.2	314.1	318.2
Open Circuit Voltage-Voc(V)	26.80	26.91	27.02	27.12
Short Circuit Current-Isc(A)	14.74	14.83	14.93	15.02
Maximum Power Voltage-Vmpp(V)	22.14	22.26	22.38	22.50
Maximum Power Current-Imp(A)	13.84	13.93	14.03	14.14

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	80cells (5×8+5×8)
Module dimensions	1754×1096×35mm
Weight	21kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	IP68

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	806	182
Number of modules per pallet	31	31
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1770×1120×1236	1770×1120×1236
Box gross weight[kg]	692	692

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.