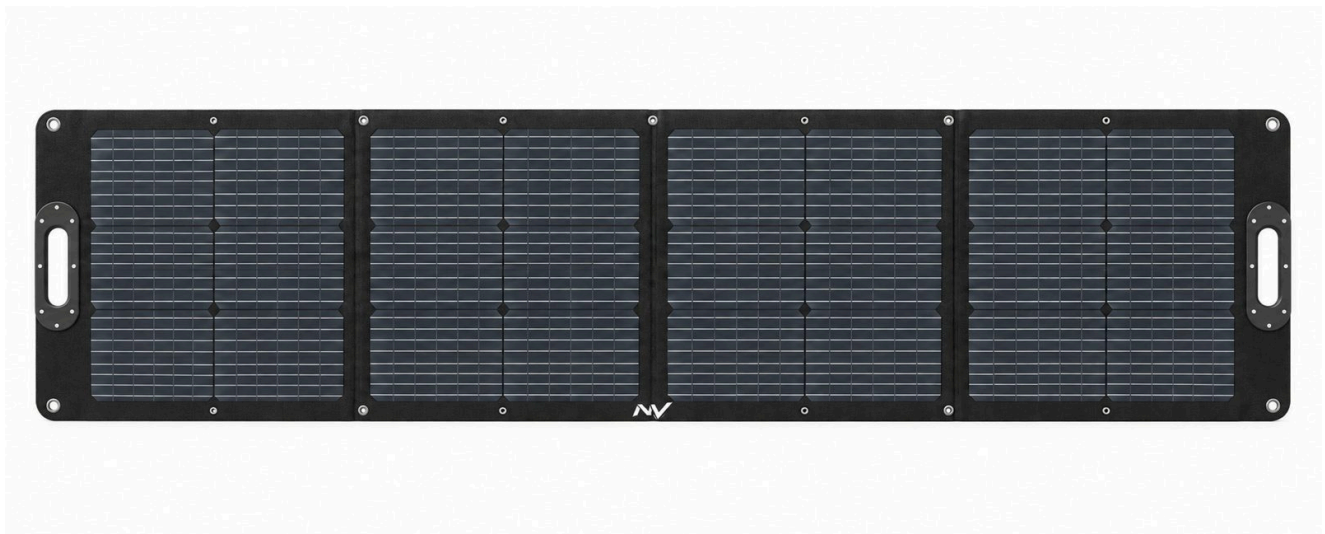


TECHNICAL DATA SHEET

NV-S240

240 W foldable solar panel

Four folds, 8.5 kg, 2.5 m of active surface once deployed. The reference panel of the range: up to six in series on an NV-W36 or an NV-W50.



240 W

RATED POWER

8,5 kg

NET WEIGHT

23 %

CELL EFFICIENCY

IP65

INGRESS PROTECTION

Specification	NV-S240
POWER	
Rated power	240 W $\pm$ 5 %
Cell efficiency	23 %
Cell type	Monocrystalline PERC silicon: grade A
Test conditions	STC: 1 000 W/m ² · AM1.5 · 25 °C
ELECTRICAL	
Open-circuit voltage (Voc)	24,6 V
Short-circuit current (Isc)	12,3 A
Max power voltage (Vmp)	20,5 V
Max power current (Imp)	11,7 A
MECHANICAL	
Folded size	665 × 590 × 60 mm
Unfolded size	2 529 × 590 × 35 mm
Net weight	8,5 kg
Gross weight	11 kg
Number of folds	4
CONNECTIONS	
Panel connector	MC4
Cables supplied	DC7909 cable and pair of MC4 connectors
ENVIRONMENT	
Ingress protection	IP65
Operating temperature	−20 °C ... 85 °C
Max system voltage	1 000 V DC
Certifications	CE · RoHS · FCC

All electrical values are given under STC: 1,000 W/m² irradiance, AM1.5 spectrum, 25 °C cell temperature. In real use, expect about 75% of peak power.

WHAT'S IN THE BOX

Foldable solar panel	× 1
DC7909 cable and pair of MC4 connectors	× 1
Detachable sun-dial indicator	× 1
User manual	× 1
Warranty card	× 1

KEY FEATURES

- Up to six panels in series on an NV-W36 or an NV-W50: 1,440 W peak, enough to refill an NV-W36 in half a day of sun.
- DC7909 cable for direct connection, plus a pair of MC4 connectors for series chaining.
- Grade-A monocrystalline PERC cells, 23% efficiency.
- Integrated kickstands and press studs: the panel unfolds, sets up and folds away without tools.
- Detachable sun-dial indicator: optimum aiming is set in seconds.
- IP65: designed to stay outside all day.

PRODUCT VIEWS



Front



Back: three kickstands and pouch



Right side



Left side



Top



Bottom

COMPATIBILITY WITH NV STATIONS

Panel open-circuit voltage : **Voc 24.6 V**

STATION	INPUT	MPPT WINDOW	NUMBER OF NV-S240	MAX POWER
NV-C24	12-78 V	16-70 V · 13 A · 800 W	1 to 3 in series	720 W
NV-P36	12-80 V	11-31 V · 10 A / 31-80 V · 15 A · 800 W	1 to 3 in series	720 W
NV-W36	12-148 V	18-140 V · 15 A · 2 100 W	1 to 6 in series	1 440 W
NV-W50	12-148 V	18-140 V · 15 A · 2 100 W	1 to 6 in series	1 440 W

Power actually achievable. On the NV-W36 and NV-W50 the input is rated 2,100 W but limited to 15 A. With NV-range panels, the maximum configuration allowed by the manufacturer (six NV-S240 in series) delivers 1,440 W. That is the figure to use when sizing an installation.

On the NV-P36, connect panels in pairs. Its controller works in two bands: up to 31 V it is limited to 10 A, above that it rises to 15 A. A single NV-S240, working at 20.5 V, therefore stays in the low band and delivers only about 205 W instead of 240 W. From two panels in series onwards the high band applies and full power is recovered.

WIRING RULES

- 1 In series, voltages add up and current stays that of a single panel. That is the wiring to use across the whole NV range. Parallel (currents add up, voltage stays put) is only useful for pairing two NV-S100 panels on an NV-C24 or an NV-P36.
- 2 Total open-circuit voltage ($V_{oc} \times \text{number of panels in series}$) must never exceed the station's maximum input voltage.
- 3 Never mix panels of different ratings or references on the same string.
- 4 Connect the harness to the station before exposing the panel to the sun, and disconnect the panel before folding it.
- 5 Aim the panel with the sun-dial indicator: the light spot must fall in the centre of the circle. Re-aim every two to three hours.
- 6 Rated powers are measured under STC. In real use (dust, angle, temperature), expect about 75% of peak power.

IN USE



NV-S240 and NV-W50: worksite



NV-S240 and NV-W50: bridge works

Illustration: not a contractual representation.

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For a quotation, tell us the equipment to be powered, the runtime required per workstation and the number of units. A priced configuration is sent back within one working day.