



Article number: 231 204
Description: NDQ0E3E/ND160E1

Module

Module type: Standard module
Frame: Aluminium anodised silver (similar to RAL 7035, light grey)
Size (W x H): 1318 x 994 mm
Frame height: 46 mm
Height of connecting box: 14 mm
Weight: 16 kg
Configuration: 48 cells (8 x 6)
Cell connection arrangement: In series

Cell

Cell type: Polycrystalline
Colour: Light blue
Size: 155.5 x 155.5 mm
Horizontal gap between cells: 2.0 mm
Vertical gap between cells: 2.0 mm
Distance from edge horizontally: 29.5 mm
Distance from edge vertically: 13.0 mm
Strip conductors: Vertical

Input and output values (STC: 1000 W/m²; 25°C; AM 1.5)

Nominal output: P_{MPP} 160 Wp
Output tolerance: +/- 5 %
Nominal voltage: U_{MPP} 22.8 V
Nominal current: I_{MPP} 7.02 A
Open-circuit voltage: U_{oc} 28.4 V
Short-circuit current: I_{sc} 8.04 A
Max. system voltage (SKL II): U_{sys} 1000 V

Module design

Front glass: 3.2 mm opal glass
Space between cells: EVA with solar cells
Reverse side: PVF-PET-PVF foil

Connection

Connecting box with bypass diodes.
Fitted connecting cable 0.9 m with MC-T3 plug system.

Packing unit

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PV module: NDQ0E3E / ND160E1

The Sharp NDQ0E3E/ND160E1 PV module builds on 40 years of technical development and offers excellent durability even in adverse environmental conditions.

The use of a bypass diode minimises the fall in output in the event of shade.

The high performance module with a cell efficiency of 13.8% achieves a module efficiency of 12.2%.

To protect them against the harshest of climatic conditions, the cells are embedded between a toughened glass covering and cast EVA, and are sealed on the reverse with PVF-PET-PVT foil. The laminate is held in a robust, easy-to-assemble aluminium frame.

Features

- Performance guarantee: 20 years: 80% of P_{Min}
10 years: 90% of P_{Min}
- 2-year product guarantee for end customers
- Each module is subjected to a 100% final inspection, with individual detection of the electrical values.
- Sharp solar modules exceed the internationally defined target values and meet the following requirements:
- JIS (Japanese Industrial Standard)
- IEC 61215, International Electrotechnical Commission, Worldwide Standard (TÜV / Rhineland)
- DIN VDE protection class II (TÜV / Rhineland)
- Connecting box with bypass diodes
- Fitted connecting cables with MC-T3 connectors