

# Modules

## SHARP

Sharp's NTR5E3E / NT175E1 photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells cultivated for over 40 years, this module has super durability to withstand rigorous operating conditions and is suitable for grid connected systems.

High-power module using 125.5 mm square monocrystalline silicon solar cells with 13.5 % module conversion efficiency.

Photovoltaic module with bypass diode minimises the power drop caused by shade. Textured cell surface to reduce the reflection of sunlight and BSF (Back Surface Field) structure to improve cell conversion efficiency.

Using white tempered glass, EVA resin, and a weatherproof film along with an aluminium frame for extended outdoor use.

**Note:**

NTR5E3E is manufactured in Japan

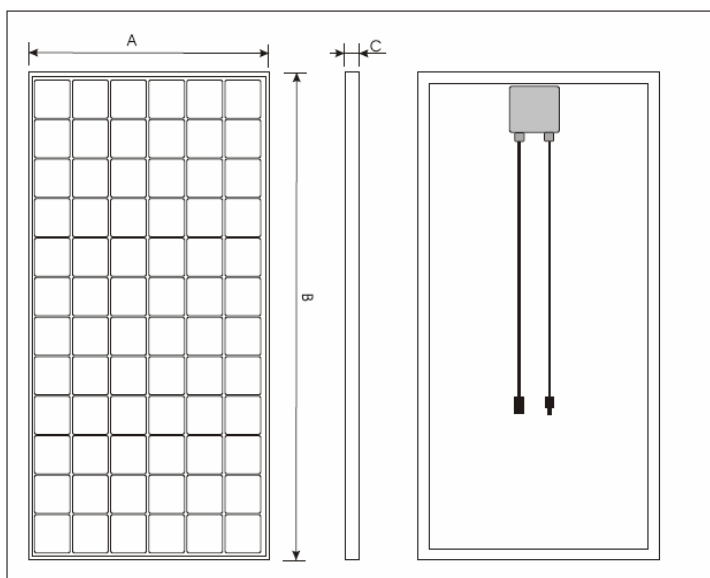
NT175E1 is manufactured in UK

Apart from the place of manufacture the models are identical in construction.



Article no.	NT175E1	
Maximum power	<b>Pmax</b>	175 Wp
Open circuit voltage	<b>Voc</b>	44.4 V
Maximum power point voltage	<b>Vmpp</b>	35.4 V
Short circuit current	<b>Isc</b>	5.40 A
Maximum power point current	<b>Impp</b>	4.95 A

The electrical data applies under Standard Test Conditions (STC): Radiation 1,000 W/m<sup>2</sup> with a spectrum of AM 1.5 and at a cell temperature of 25 °C.



**Component materials**

<b>Cells per module</b>	72
<b>Cell type</b>	mono crystalline silicon
<b>Cell dimensions</b>	125.5 x 125.5 mm

**Thermal characteristics**

<b>NOCT</b>	46°C
<b>TC Isc</b>	0.053 %/K
<b>TC Voc</b>	-0.35 %/K

**System integration parameters**

<b>Max. system voltage SC II</b>	1,000 VDC
<b>Max. reverse current</b>	Do not apply external voltages larger than Voc to the module

**Additional data**

<b>Power tolerance</b>	+/- 3 %
<b>Junction box</b>	IP 65
<b>Connector</b>	MC type 1

**Dimensions**

<b>A</b>	826	mm
<b>B</b>	1575	mm
<b>C</b>	46	mm
<b>Weight</b>	17	kg

The modules are certified in accordance with:  
IEC 61215, CE, Safety class II, TUV

The Sun Factory reserves the right to make specification changes with-