

80 WATT



FEATURES

High-power module (80W) using 125mm square multi-crystal silicon solar cells with 12.60% module conversion efficiency.

Photovoltaic module with bypass diode minimizes the power drop caused by shade.

Textured cell surface to reduce the reflection of sunlight and BSF (Black Surface Field) structure to improve cell conversion efficiency: 14.11%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

Nominal 12 volt output for battery charging applications

Output terminal: Lead wire with waterproof connector

CLEAN, SAFE, RELIABLE SOLAR ENERGY FROM SHARP

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 80W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's NE-80E1U photovoltaic module is designed for a variety of electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for use in most solar systems.

Common applications for the Sharp NE-80E1U include private residences, RVs, cabins and vacation homes, solar power stations, pumps, beacons and lighting equipment. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

APPLICATIONS

- Residences
- Solar Power Stations
- Radio Relay Stations
- Cabins and Vacation Homes
- Lighting Equipment
- RVs
- Solar Villages
- Pumps
- Beacons
- Traffic Signs

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	135 x 70 x 11cm / 53.19 x 27.58 x 4.334"
Loading Capacity (20ft container)	288 pcs - 144 carton
Loading Capacity (40ft container)	600 pcs - 300 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	125mm square
No. of cells and connections	36 in series
Application	Battery Charging System
Maximum system voltage	DC 600V
Series fuse rating	10A
Maximum power	72.0W (Min)
Dimensions	1200 x 530 x 35mm / 47.28 x 20.88 x 1.379"
Weight	8.5 kg / 18.743 lbs

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: NE-80E1U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	V _{oc}	–	21.3	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	V _{pm}	–	17.1	V	
Short Circuit Current	I _{sc}	–	5.31	A	
Maximum Power Current	I _{pm}	–	4.67	A	Module Temperature: 25°C
Maximum Power	P _m	72.0	80.0	W	
Encapsulated Solar Cell Efficiency	η _c	–	14.11	%	
Module Efficiency	η _m	–	12.60	%	
PTC Rating – 87.80					

Specifications are subject to change without notice.

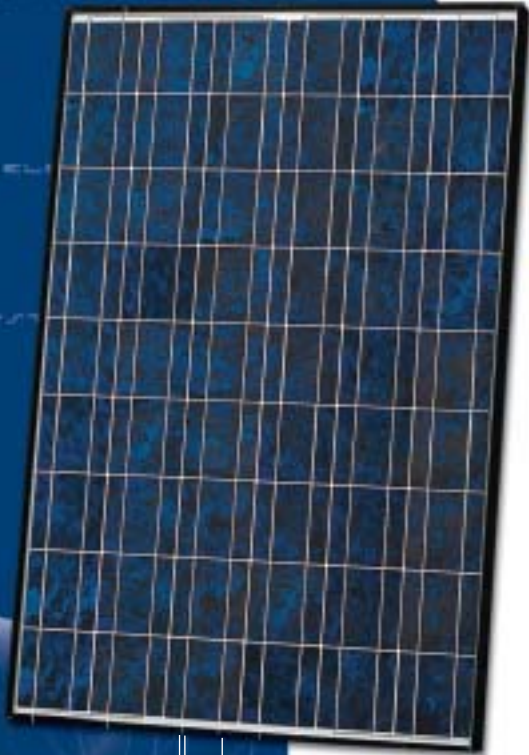
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123 WATT



FEATURES

High-power module (123W) using 155mm square multi-crystal silicon solar cells with 12.39% module conversion efficiency.

Photovoltaic module with bypass diode minimizes 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: 14.13%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

Nominal 12 Volt output for battery charging applications

Output terminal: Lead wire with waterproof connector

SUPERB DURABILITY WITH IMPROVED CELL CONVERSION EFFICIENCY

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 123W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's ND-L3E1U photovoltaic module is designed for a variety of electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for use in most solar systems.

Common applications for the Sharp ND-L3E1U include private residences, RVs, cabins and vacation homes, solar power stations, pumps, telemetry systems, beacons and traffic lights. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

ND-L3E1U – HIGH POWER MODULE

APPLICATIONS

- Telecommunications Systems
- Telemetry Systems
- Radio Relay Stations
- Cabins and Vacation Homes
- Solar Power Stations
- Lighting Equipment
- Solar Villages
- Residences
- RVs
- Pumps
- Traffic Signs
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	160 x 78 x 13cm / 63.04 x 30.732 x 5.122"
Loading Capacity (20ft container)	196 pcs - 98 carton
Loading Capacity (40ft container)	420 pcs - 210 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	155 mm square
No. of Cells and Connections	36 in series
Application	Battery Charging System
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	110.7W (Min)
Dimensions	1499 x 662 x 46mm / 59.06 x 26.08 x 1.812"
Weight	14.0kg / 30.87lbs

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: ND-L3E1U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	Voc	–	21.3	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	Vpm	–	17.2	V	
Short Circuit Current	Isc	–	8.12	A	
Maximum Power Current	Ipm	–	7.16	A	Module Temperature: 25°C
Maximum Power	Pm	110.7	123.0	W	
Encapsulated Solar Cell Efficiency	η_c	–	14.13	%	
Module Efficiency	η_m	–	12.39	%	
PTC Rating – 87.60					

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125 WATT



FEATURES

High-power module (125W) using 125mm square multi-crystal silicon solar cells with 13.26% module conversion efficiency.

Photovoltaic module with bypass diode minimizes 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: 14.70%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

High-voltage output for grid connected system

Output terminal: Lead wire with waterproof connector

AN ADVANCED SOLAR SOLUTION FROM THE GLOBAL LEADER

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 125W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's NE-K125U2 photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp NE-K125U2 include residences, office buildings, solar power stations, pumps, lighting equipment and traffic signs. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

NE-K125U2 – SUPERIOR POWER

APPLICATIONS

- Grid Connected Residential Systems
- Office Buildings
- Solar Power Stations
- Solar Villages
- Villas
- Pumps
- Lighting Equipment
- Traffic Signs
- Radio Relay Stations
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	130 x 93 x 13cm / 51.22 x 36.642 x 5.122"
Loading Capacity (20ft container)	280 pcs - 140 carton
Loading Capacity (40ft container)	588 pcs - 294 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	125 mm square
No. of Cells and Connections	54 in series
Application	High-Voltage System
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	112.5W (Min)
Dimensions	1190 x 792 x 46mm / 46.887 x 31.2 x 1.812"
Weight	12.5kg / 27.563lbs

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: NE-K125U2

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	V _{oc}	–	32.3	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	V _{pm}	–	26.0	V	
Short Circuit Current	I _{sc}	–	5.46	A	
Maximum Power Current	I _{pm}	–	4.80	A	Module Temperature: 25°C
Maximum Power	P _m	112.5	125.0	W	
Encapsulated Solar Cell Efficiency	η _c	–	14.70	%	
Module Efficiency	η _m	–	13.26	%	
PTC Rating – 87.80					

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160 WATT



FEATURES

High power module (160W) using 155mm square multi-crystal silicon solar cells with 12.21% module conversion efficiency.

Photovoltaic module with bypass diode minimizes 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: 13.99%.

White tempered glass, EVA resin, and weatherproof film, plus aluminum frame for extended outdoor use.

High-voltage output for grid connected system

Output terminal: Lead wire with waterproof connector

HIGH RELIABILITY WITH HIGH VOLTAGE OUTPUT

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 160W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's ND-Q0E2U photovoltaic module is designed for grid connected electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp ND-Q0E2U include residences, office buildings, solar power stations, solar villages, radio relay stations, beacons and traffic lights. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

ND-Q0E2U – POWER FOR LIFE

APPLICATIONS

- Grid Connected Residential Systems
- Office Buildings
- Solar Power Stations
- Solar Villages
- Villas, Mountain Cottages
- Telecommunication Systems
- Telemetry Systems
- Pumps
- Lighting Equipment
- Traffic Signs
- Radio Relay Stations
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	143 x 108 x 13cm / 56.342 x 42.552 x 5.122"
Loading Capacity (20ft container)	224 pcs - 112 carton
Loading Capacity (40ft container)	448 pcs - 224 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	155 mm square
No. of Cells and Connections	48 in series
Application	High-Voltage System
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	144.0W (Min)
Dimensions	1318 x 994 x 46mm / 51.929 x 39.163 x 1.812"
Weight	16.0kg / 35.28lbs

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: ND-Q0E2U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	V _{oc}	–	28.4	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	V _{pm}	–	22.8	V	
Short Circuit Current	I _{sc}	–	8.04	A	
Maximum Power Current	I _{pm}	–	7.02	A	Module Temperature: 25°C
Maximum Power	P _m	144.0	160.0	W	
Encapsulated Solar Cell Efficiency	η _c	–	13.79	%	
Module Efficiency	η _m	–	12.21	%	
PTC Rating – 87.60					

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165 WATT



FEATURES

High-power module (165W) using 125mm square multi-crystal silicon solar cells with 12.68% module conversion efficiency.

Photovoltaic module with bypass diode minimizes 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: 14.55%.

White tempered glass, EVA resin, and a weatherproof film, plus aluminum frame for extended outdoor use.

Nominal 24 DC output, perfect for grid connected systems

Output terminal: Lead wire with waterproof connector

A DURABLE MODULE FOR LARGE ELECTRICAL POWER NEEDS

MULTI-SILICON PHOTOVOLTAIC MODULE WITH 165W MAXIMUM POWER

A safe, clean, reliable source of energy, Sharp's NE-Q5E2U photovoltaic module is designed for large electrical power requirements. Based on the technology of crystal silicon solar cells developed over 35 years, this module has superb durability to withstand rigorous operating conditions and is suitable for grid connected systems.

Common applications for the Sharp NE-Q5E2U include residences, office buildings, solar power stations, solar villages, radio relay stations, beacons and traffic lights. As the world's leading manufacturer of photovoltaic modules, Sharp produces an extensive line of high power modules for every electrical power requirement.

NE-Q5E2U – MAXIMUM POWER

APPLICATIONS

- Grid Connected Residential Systems
- Office Buildings
- Solar Power Stations
- Solar Villages
- Villas, Mountain Cottages
- Telecommunication Systems
- Telemetry Systems
- Pumps
- Lighting Equipment
- Traffic Signs
- Radio Relay Stations
- Beacons

HANDLING SPECIFICATIONS

Packing Condition	2 pcs - 1 Carton
Size of Carton	170 x 97 x 13cm / 66.98 x 38.218 x 5.122"
Loading Capacity (20ft container)	168 pcs - 84 carton
Loading Capacity (40ft container)	392 pcs - 196 carton

SPECIFICATIONS

Cell	Multi-crystal silicon solar cells
	125 mm square
No. of Cells and Connections	72 in series
Application	DC 24V system
Maximum System Voltage	DC 600V
Series Fuse Rating	10A
Maximum Power	148.5W (Min)
Dimensions	1575 x 826 x 46mm / 62.05 x 32.44 x 1.812"
Weight	17.0kg / 37.485lbs

ABSOLUTE MAXIMUM RATINGS

Parameters	Rating	Unit
Operating Temperature	-40 to +90	°C
Storage Temperature	-40 to +90	°C
Dielectric Voltage Withstood	2200 max.	V-DC

OUTPUT TERMINAL

Type of Output Terminal	Lead Wire with MC Connector
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ELECTRO-OPTICAL CHARACTERISTICS: NE-Q5E2U

Parameters	Symbol	Min.	Typ.	Unit	Condition
Open Circuit Voltage	V _{oc}	–	43.1	V	Irradiance: 1000 W/m ²
Maximum Power Voltage	V _{pm}	–	34.6	V	
Short Circuit Current	I _{sc}	–	5.46	A	
Maximum Power Current	I _{pm}	–	4.77	A	Module Temperature: 25°C
Maximum Power	P _m	148.5	165.0	W	
Encapsulated Solar Cell Efficiency	η _c	–	14.55	%	
Module Efficiency	η _m	–	12.68	%	
PTC Rating – 87.80					

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