



German
Solar
Production



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NEWTEK GRADE A+ series
NEWTEK NTE 270/275/280-60M

Monocrystalline Photovoltaic Module

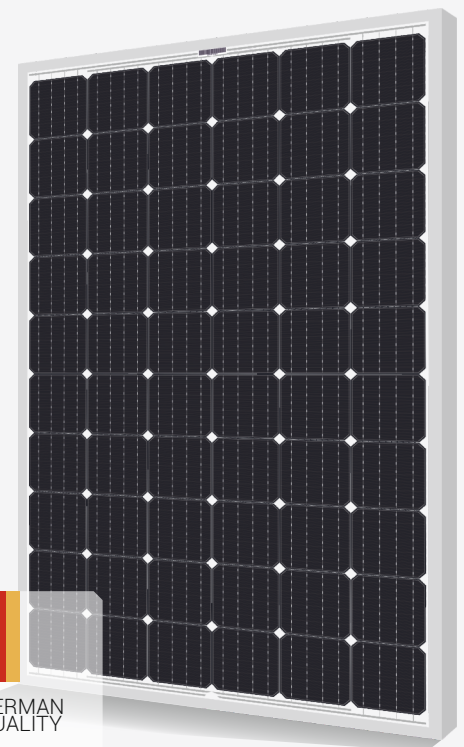
Premium Quality
PV Solar Module

Data sheet

NEWTEK NTE photovoltaic modules of **GRADE A+** are manufactured using German technology with application of A grade 60 monocrystalline cells; the efficiency of cells starts from 19.4%. The output power of the module starts from 270W and up to 280W.

Combining cost-effective prices, aesthetic design, ease of installation and long life time (at least 25 years), our PV solar modules are the optimal solution for the construction of a large solar power plant and for autonomous or backup power systems for any suburban or a multi-storey house.

NEWTEK NTE PV solar modules are manufactured using German technology and equipment (SCHMID GROUP) in compliance with all standards.



10
years

10 years manufacturer's warranty for materials and workmanship compliant to industrial standard

4BB

Greater number of bus-bars provide uniform heating
Guarantee lower degradation of silicon cells

P-Max

High performance in low light is reached
by unique technology and materials

Wp

Positive power tolerance from 0-5W
Higher guaranteed yield

550 KG

Snow load up to 550 kg / m²
Durable operating capacity in extreme conditions

100%

100% inspection of manufacturing at 3 stages
and control over micro cracks on the cells

Soft Grip

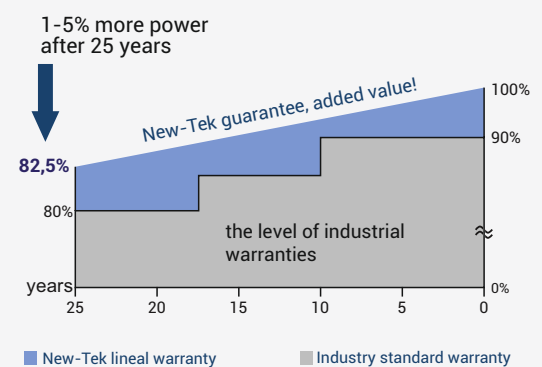
Reinforced anodized aluminum frame
Higher durability and ease of installation

IP 65

High quality of Junction Box with climate membrane
for condensation prevention

lotus

The front glass is anti-reflective layer coated
with the "Lotus" effect for high performance



10 YEARS PRODUCT · 25 YEARS POWER

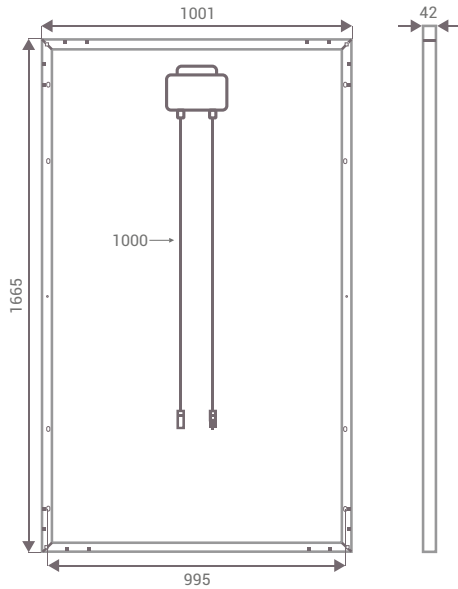
Designed in GE
Produced in KG



NTE 270/275/280-60M

MONOCRYSTALLINE PV SOLAR MODULE

Mono-Series
NEWTEK GRADE A+



GENERAL CHARACTERISTICS

Dimensions	1665x1001x42 mm
Weight	18,5 kg

PACKAGING

Modules per Pallet	45
No pallets per track	15
Dimensions of Pallet (L/W/H)	1780x1100x2200 mm

The maximum capacity per 40' container are 784 pcs

TEMPERATURE RATING

NOCT	46 ± 2° C
Coefficients of (Pmax)	-0.41 %/°C
Coefficients of (Voc)	-0.30 %/°C
Coefficients of (Isc)	+0.05 %/°C

CERTIFICATIONS



IEC 61215 IEC 61730

IEC 61215, IEC 61730-1, IEC 61730-2, RST, EAC

ELECTRICAL DATA

STC (test conditions)	NTE 270 60P	NTE 275 60P	NTE 280 60P
Maximum Power at STC (Pmax)	270 W	275 W	280 W
Optimum Operating Voltage (Vmp)	31,30 V	31,50 V	31,60 V
Optimum Operating Current (Imp)	8,65 A	8,75 A	8,85 A
Open Circuit Voltage (Voc)	38,50 V	38,70 V	38,90 V
Short Circuit Current (Isc)	9,20 A	9,30 A	9,40 A
Cell Efficiency	19,40 %	19,80 %	20,20 %

Electric characteristics at normal operation conditions (STC)
STC Conditions: Irradiance: 1 000 W/m², cell temperature: 25°C, AM=1.5

NOCT (test conditions)	NTE 270 60P	NTE 275 60P	NTE 280 60P
Maximum Power at STC (Pmax)	201 W	205 W	208 W
Optimum Operating Voltage (Vmp)	29,30 V	29,50 V	29,70 V
Optimum Operating Current (Imp)	6,85 A	6,90 A	7,00 A
Open Circuit Voltage (Voc)	35,60 V	35,80 V	36,00 V
Open Circuit Current (Isc)	7,45 A	7,50 A	7,55 A

Electric characteristics at normal operation conditions (NOCT)
NOCT Conditions (46 ± 2° C): Irradiance: 800 W/m², ambient temperature: 20°C, AM=1.5, wind speed: 1m/s

OPERATIVE CONDITIONS

Power Tolerance	0/+5 W
Maximum System Voltage	1.000 V
Maximum Series Fuse Rating	16 A
Operating Temperature Range	-40° C to 85° C
Maximum Static Load, Front (Snow)	5 400 Pa
Maximum Static Load, Back (Wind)	2 400 Pa
Fire Rating	Class A

MECHANICAL CHARACTERISTICS

Solar Cells - GRADE A	Monocrystalline silicon cells 156x156 mm, 4BB
Cell Arrangement	60 cells in module
Front Cover	Low-iron tempered glass, 3.2 mm, with AR
Reinforced Frame (wall thickness)	Anodize aluminum alloy (2,0 mm)
Encapsulant	Composite film (EVA+Backsheet)
Junction Box	IP65, climatic membrane
Bypass Diodes	3
Cables (length/area)	1000 mm / 4 mm ² , (IEC), 12 AWG (UL)
Connectors	MC4

Caution:
To operate, install and manage New-Tek's modules, read the installation manual and use carefully.

Observations:
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