

Under Shanshan Group, Top500 Enterprise in China, Ulica Solar produces our own high quality solar cells and modules starting from August 2005. Our product range covers all from off-grid panels to on-grid panels, both mono-crystalline and poly-crystalline, suitable for all types of installation from residential to commercial projects.

NEW (5BB)



New 5 Bus bar cell technology

Mechanical stress distributed with better balance
Minimum reduced micro cracks and resistance losses
Increased module performance with higher Fill Factor



Positive power output (0~+5W)



Outstanding mechanical load resistance

Snow load 5400Pa (Frontside), and Wind load 3800Pa (Backside)



High performance under low light conditions

Cloudy days, Rainy days



Anti-PID (potential induced degradation) Test

Passed anti-PID test under Damp Heat 85°C and 85% RH 96Hours



Durability against extreme environmental conditions

Salt mist corrosion test, Ammonia corrosion test, Dust & Sand test, Fire test, certified by TÜV



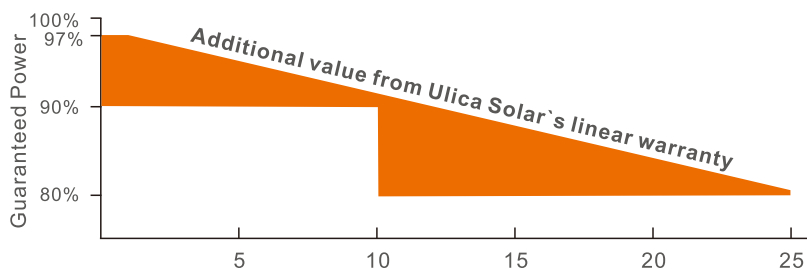
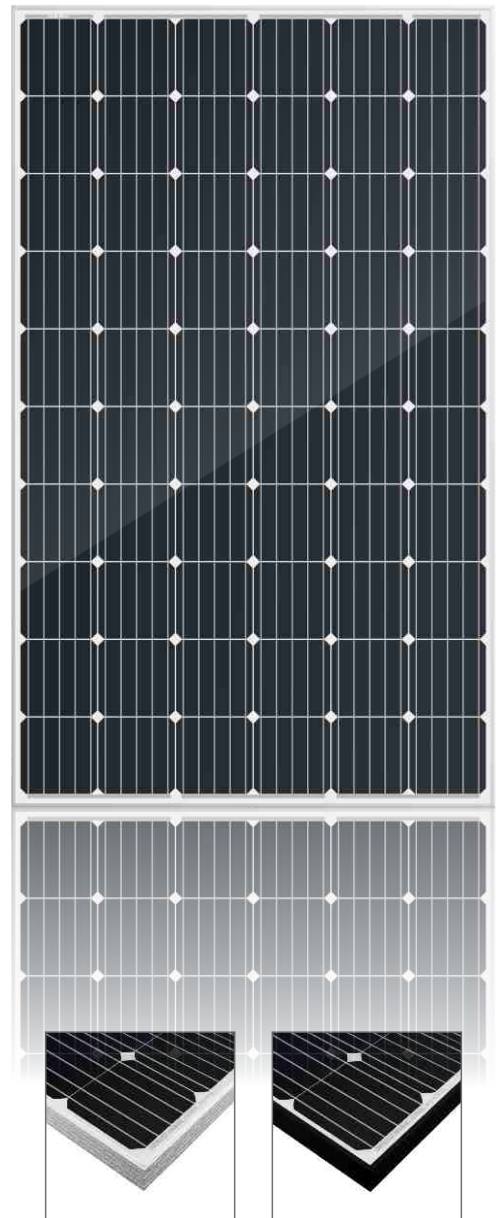
Double EL test before and after lamination

Highly control the micro cracks and invisible defects.



World famous insurance against our warranty

CHUBB Insurance from USA, Solar Insurance & Finance from Netherlands



12-year workmanship warranty

25-year linear performance warranty



MONO 275W/280W/285W

ELECTRICAL PERFORMANCE

Electrical Parameters Standard Test Conditions

Module Type			UL-275M-60	UL-280M-60	UL-285M-60
Power Output	P _{max}	W	275	280	285
Power Tolerance	ΔP _{max}	%		0/+5W	
Module Efficiency	η _m	%	16.80	17.11	17.41
Voltage at P _{max}	V _m	V	31.2	31.3	31.8
Current at P _{max}	I _m	A	8.82	8.95	8.96
Open-Circuit Voltage	V _{oc}	V	38.4	38.5	39.1
Short-Circuit Current	I _{sc}	A	9.25	9.37	9.41

STC: 1000W/m² irradiance, 25°C module temperature, AM1.

THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	45±2
Temperature Coefficient of P _{max}	γ	%/°C	-0.403
Temperature Coefficient of V _{oc}	β _{voc}	%/°C	-0.330
Temperature Coefficient of I _{sc}	α _{isc}	%/°C	+0.049

OPERATING CONDITIONS

Max. System Voltage	1000V
Max. Series Fuse Rating	15A
Operating Temperature Range	-40°C~85°C
Max. Static Load, Front(e.g., snow and wind)	5400Pa
Max. Static Load, Back(e.g., wind)	3800Pa
Application Class	A

CONSTRUCTION MATERIALS

Front Cover(material/type/thickness)	low-iron tempered glass/3.2mm
Cell(quantity/material/type/dimension)	60/monocrystalline/156x156mm
Encapsulant(material)	ethylene vinyl acetate(EVA)
Frame(material/anodization color)	anodized aluminum alloy/silver or black
Junction Box(protection degree)	IP67
Cable(length/cross-sectional area)	900mm/4mm ²
Plug Connector	MC4 compatible

GENERAL CHARACTERISTICS

Dimension(L/W/H)	1650/992/40mm
Weight	18.5kg

PACKING CONFIGURATION

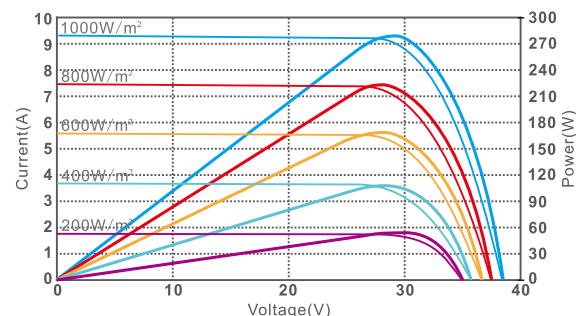
Pallet Size(L/W/H)	1730/1120/2350mm
Pallet Weight	1000kg
Pieces per Pallet	52pcs
Pieces per Container	676pcs

INTERNATIONAL CERTIFICATES

- TÜV SÜD, TÜV NORD, UL, CE, JET, CEC
- MCS, CQC, IMERTRO, NRE, KS
- ISO9001:2008
- ISO14001:2004
- BS OHSAS 18001:2007

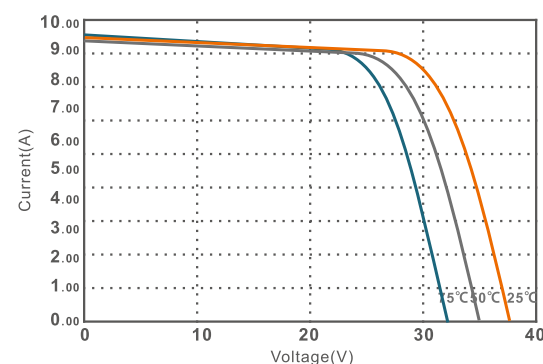
I-V CURVE

I-V characteristics at different irradiances

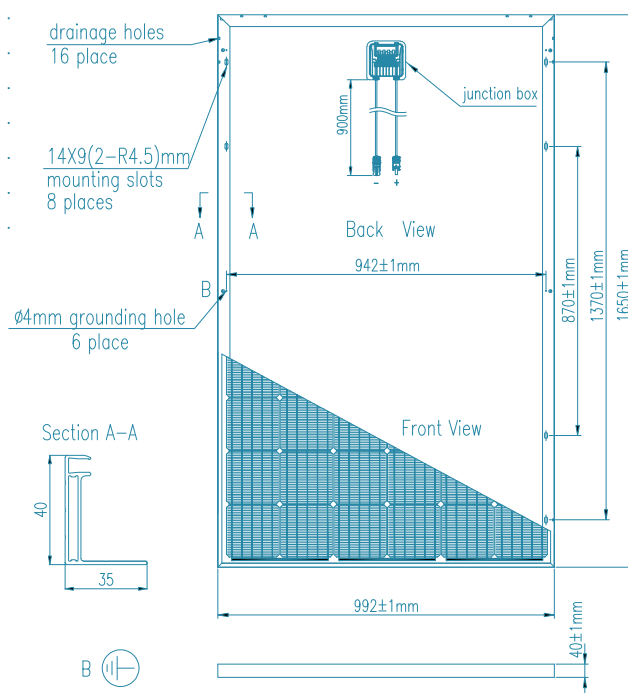


UL-280M-60

I-V characteristics at different temperature



UL-280M-60



Please read the instruction manual in this entirety before handing, installing, and operating Ulica Solar modules.
Due to continuous innovation, research and improvement, the specification is subject to change without prior notice.