

**UL-175M-40 DG**

**UL-180M-40 DG**

**DOUBLE GLASS**

1500V



**Reduced system cost**

1500V Higher maximum system voltage reduces BoS costs



**Improved durability and reliability**

Double tempered glass increases the module robustness to minimize micro-cracks



**PID Free and Snail Trail Free**

Without backsheets and frame reduces the water permeability and PID risks.



**High Fire-resistance rating**

1000°C heat resistant glass ensu



**Reduced daily maintenance**

Frameless design allows less accumulation of sand, dust or snow at the edge.



**Excellent performance in harsh environmental conditions**

5400Pa Snow Load Test, 2400Pa Wind Load Test. Better resistance to corrosion against high-temperature, high-humidity, acid, salty mist, sandy and other harsh conditions.



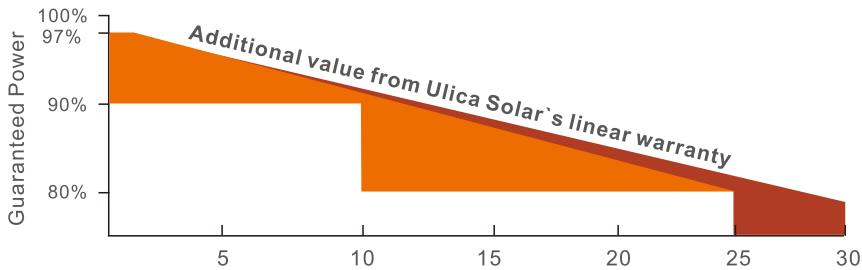
**Longer lifetime**

Less annual power loss of 0.5%, and provide 30 years performance warranty



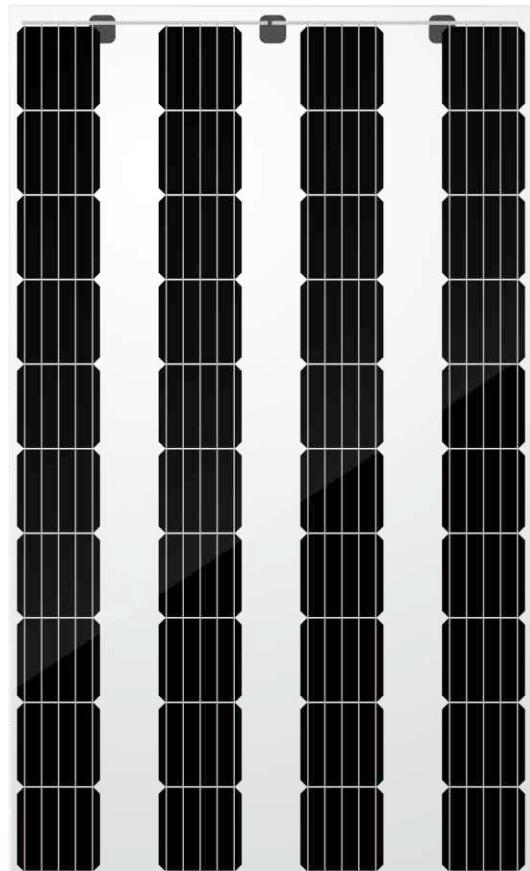
**World famous insurance against our warranty**

CHUBB Insurance from USA, Solar Insurance & Finance from Netherlands



**12-year workmanship warranty**

**30-year linear performance warranty**



## II ELECTRICAL PERFORMANCE

Electrical Parameters Standard Test Conditions

Module Type	UL-175M-40 DG		UL-180M-40 DG	
Power Output	Pmax	W	175	180
Power Tolerance	△Pmax	%		0/+5W
Module Efficiency	η m	%	10.64	10.94
Voltage at Pmax	V <sub>m</sub>	V	20.6	20.8
Current at Pmax	I <sub>m</sub>	A	8.50	8.66
Open-Circuit Voltage	V <sub>oc</sub>	V	25.4	25.5
Short-Circuit Current	I <sub>sc</sub>	A	9.05	9.20

STC: 1000W/m<sup>2</sup> irradiance, 25°C module temperature, AM1.5 spectrum.

## II THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	45±2
Temperature Coefficient of Pmax	γ	%/°C	-0.403
Temperature Coefficient of V <sub>oc</sub>	β <sub>voc</sub>	%/°C	-0.330
Temperature Coefficient of I <sub>sc</sub>	α <sub>isc</sub>	%/°C	+0.049

## II OPERATING CONDITIONS

Max.System Voltage	1500V
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)	2400Pa
Application Class	A

## II CONSTRUCTION MATERIALS

Front Cover(material/type/thickness)	low-iron tempered glass/2.5mm
Cell(quantity/material/type/dimension)	40/monocrystalline/156x156mm
Encapsulant(material)	ethylene vinyl acetate(EVA)
Junction Box(protection degree)	IP67
Cable(length/cross-sectional area)	400mm/4mm <sup>2</sup>
Plug Connector	MC4 compatible

## II GENERAL CHARACTERISTICS

Dimension(L/W/H)	1658/992/6mm
Weight	23.5kg

## II PACKING CONFIGURATION

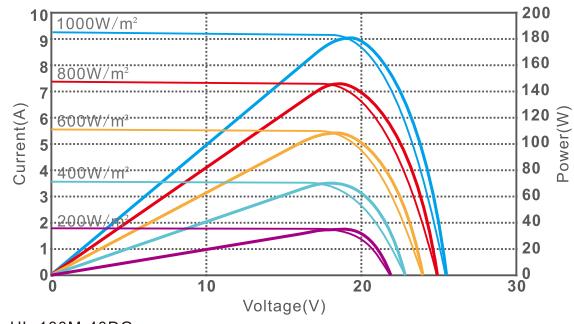
Pallet Size(L/W/H)	1730/1120/2350mm
Pallet Weight	1520kg
Pieces per Pallet	60pcs
Pieces per Container	780pcs

## II INTERNATIONAL CERTIFICATES

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

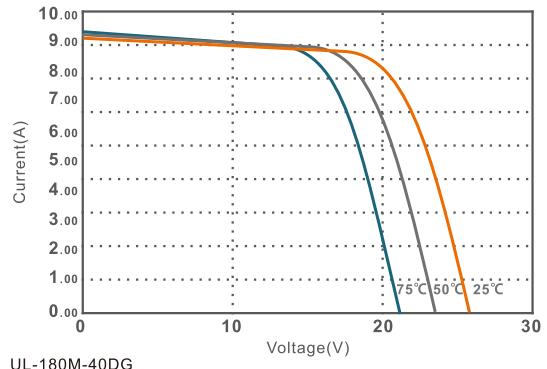
## II I-V CURVE

I-V characteristics at different irradiations

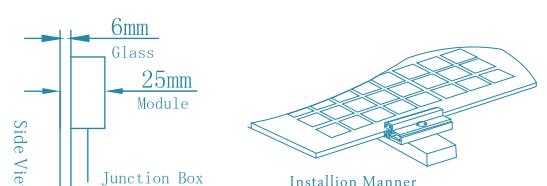
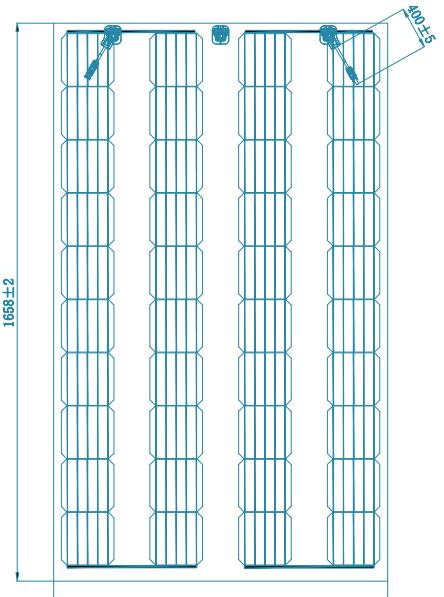


UL-180M-40DG

I-V characteristics at different temperature



UL-180M-40DG



Please read the instruction manual in this entirety before handling, installing, and operating Ulica Solar modules.

Due to continuous innovation, research and improvement, the specification is subject to change without prior notice.