



SOLAR PANEL

DFE050S-12U

High Efficiency Monocrystalline PV Module

36 CELL

MONOCRYSTALLINE MODULE

50W

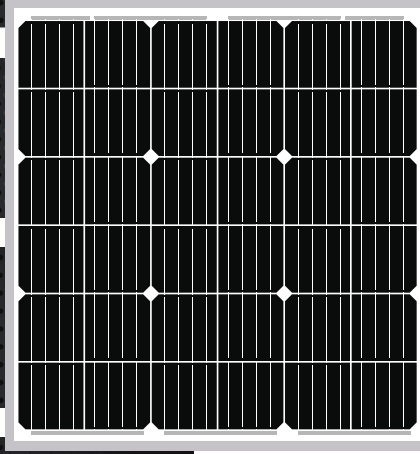
POWER OUTPUT

20.00%

MODULE EFFICIENCY

5%

POSITIVE TOLERANCE



- Nominal 12V DC for standard output.
- Outstanding low-light performance.
- Heavy-duty anodized frames.
- High transparent low-iron, tempered glass.
- Designed to withstand high wind pressures, Hail, and heavy snow.
- Quality aesthetic appearance.



High
Efficiency

Module Efficiency improved through advanced cell technology and manufacturing capabilities.



High PID
Resistance

Advanced cell technology and qualified materials lead to high resistance to PID.



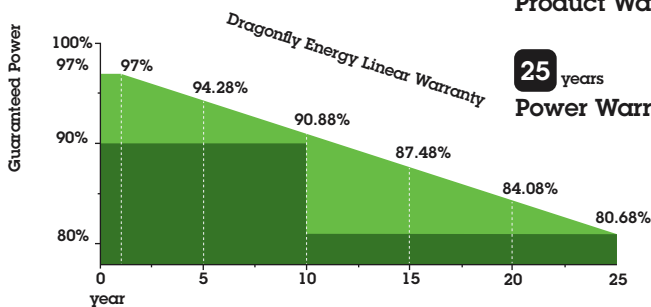
Withstand Harsh
Environment

High PID Resistance
5400 Pa positive load
2400 Pa negative load
Salt mist (IEC 61701)

Performance Warranty

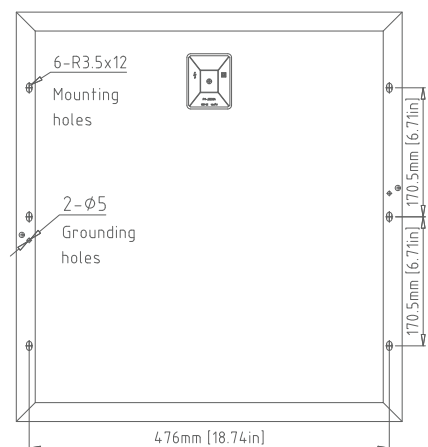
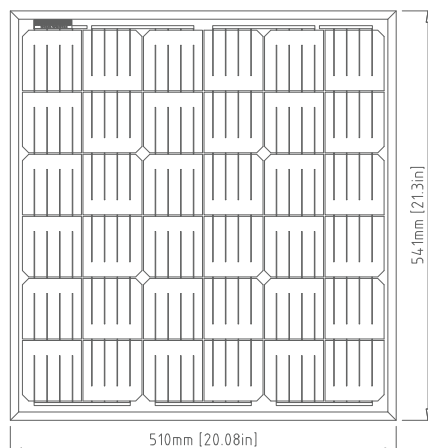
10 years
Product Warranty

25 years
Power Warranty



Product Certificate	IEC 61215, IEC61730
Management Certificate	ISO 9001:2016
Other certificate	Fire Rating Class C, TÜV Rheinland
Positive mechanical load	>5400Pa
Positive power tolerance	0~+5W
Warranty information	2 Year Product Warranty and Workmanship



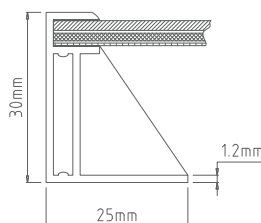
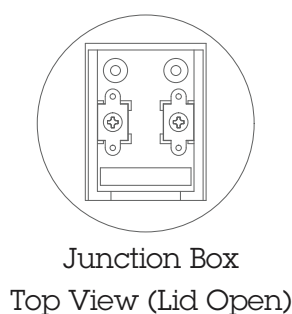


Dimensions in brackets are in inches.
Un-bracketed dimensions are in millimeters.
Unit: mm[in.]

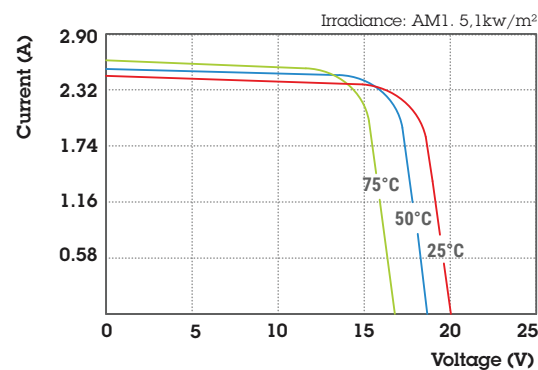
Electrical Characteristics		DFE050S-12U
Product Code		050031201A
Maximum Power (P _{max})		50W
Voltage at P _{max} (V _{mp})		20.84V
Current at P _{max} (V _{mp})		2.35A
Open-circuit Voltage (V _{oc})		24.04A
Short Circuit Voltage (V _{oc})		2.48A
Temperature Coefficient of V _{oc}		-(80±10)mV/°C
Temperature Coefficient of I _{sc}		(0.065±0.015)%/°C
Temperature Coefficient of Power		-(0.5±0.05)%/°C
NOCT (Air 20°C; Sun 0.8kW/m ² wind 1m/s)		47±2°C
Operating Temperature		-40°C to 85°C
Maximum System Voltage		1000V DC
Power Tolerance		±5%

*STC: Irradiance 1000/m², AM1.5 spectrum, module temperature 25°C
*NOCT: Nominal operating cell temperature (the data is only for reference)

Specifications		DFE050S-12U
Cells		Monocrystalline silicon solar cell
No. of cells and connections		36(6x6)
Module dimension		541mm[21.30in.]*x510mm[20.08in.]*x30mm[1.18in.]
Weight		3.28kg[7.25lbs]
Packing information		590mm[23.23in.]*x560mm[22.05in.]*x80mm[3.15in.]/(1pc/ctn)



Characteristics



DFE050S-12U I-V Curves