



TENGYING

Lightweight Solar Pioneer

FLEX520

520Watt



Ultra-light: By replacing the glass and optimising the framing, the module only weighs 4.1kg/m², 60% lighter than equivalent conventional glass modules.



Effortless installation: Module with the mounting structure pre-integrated. Eliminating the need for a traditional panel mounting structure. Saving time and installation cost.



Wide range of applications: Supports all types of installation method including roof adhesive mounting or removable mechanical mounting. Providing customers with more choices.



Safety: Integration with underlying installation surface, ensuring the waterproof performance and safety performance of the roof.



Durable: FLEX520 is the first glassless module to pass the same durability standards as conventional glass modules, including IEC 61215:2016, IEC 61730:2016 and UL61730(USA).

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

25 Year Linear Power Warranty

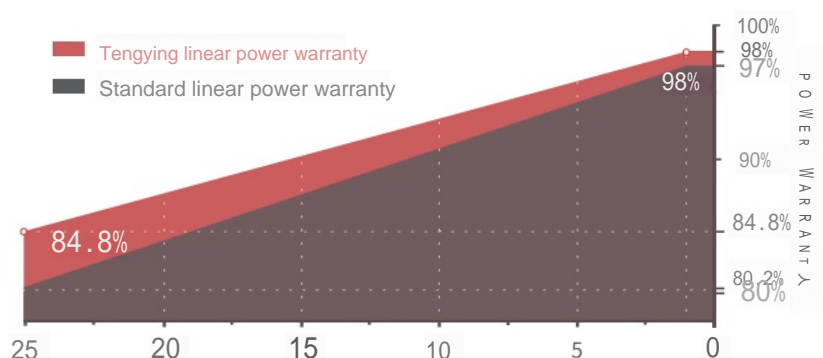
CAUTION: Read installation manual before using the product

©2023 Tengying New Energy. All rights reserved. Specifications included in this datasheet are subject to change without notice.

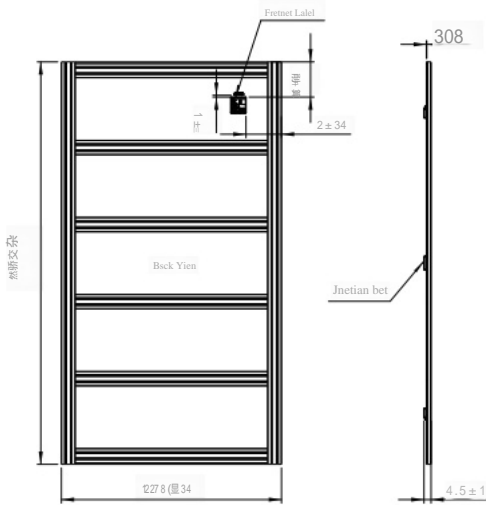
www.tyeenergy.com

Business consulting: manager@tyeenergy.com

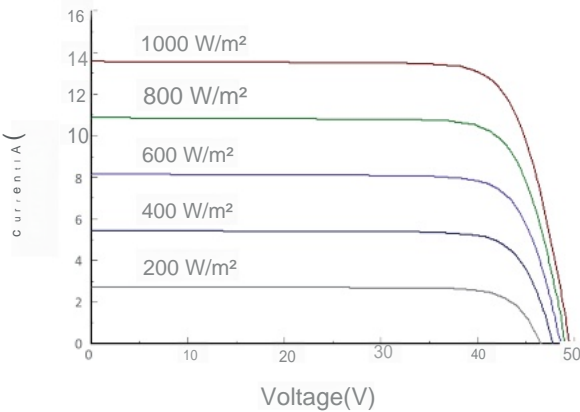
Media cooperation: marketing@tyeenergy.com



DIMENSIONS



I-V CURVE(520)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT)	$41 \pm 2C$
Temperature Coefficient of P_m	$-0.34 \% / C$
Temperature Coefficient of v_o	$-0.26 \% / C$
Temperature Coefficient of i_{sc}	$0.033 \% / C$



ELECTRICAL CHARACTERISTICS

STC	FLEX520
Maximum Power(P_{max})	520
Maximum Power Voltage(V_{mp})	42.3
Maximum Power Current (I_{mp})	12.31
Open-circuit Voltage(V_o)	49.5
Short-circuit Current (I_{sc})	13.56
Module Efficiency (%)	19.3
Operating Temperature	40 to 85
Maximum System Voltage	1500 V DC (IEC)
Maximum Series Fuse Rating	25A
Application Class	ClassA
Power Tolerance	0/+5W

STC: Irradiance 1000W/m², Cell temperature 25C, AM=1.5.

NMOT	FLEX520
Maximum Power(P_{ma})	429.2
Maximum Power Voltage(V_m)	41.8
Maximum Power Current (I_m)	10.26
Open-circuit Voltage(V_{oc})	49.8
Short-circuit Current(I_{sc})	10.82

NMOT: Irradiance 800W/m², Ambient temperature 20C, AM=1.5, Wind speed 1m/s.

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon(182mm half cell)
No. of Cells	144(12x12)
Module Dimensions	2246x1197x2 mm
Product Dimensions	2246x1227.8x40.5 mm
Weight	11.1kg
Backsheet	White
J-box	IP 68 rated
Output Cables	Photovoltaic cable 4.0 mm 2,(+)4501(-)450 mm
Connector	MC4 compatible

PACKAGING CONFIGURATION

	20'GP	40'HC
Module per pallet	34	34
Pieces per container	136	272