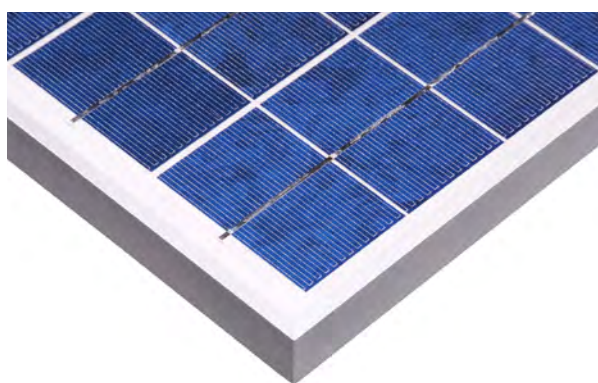
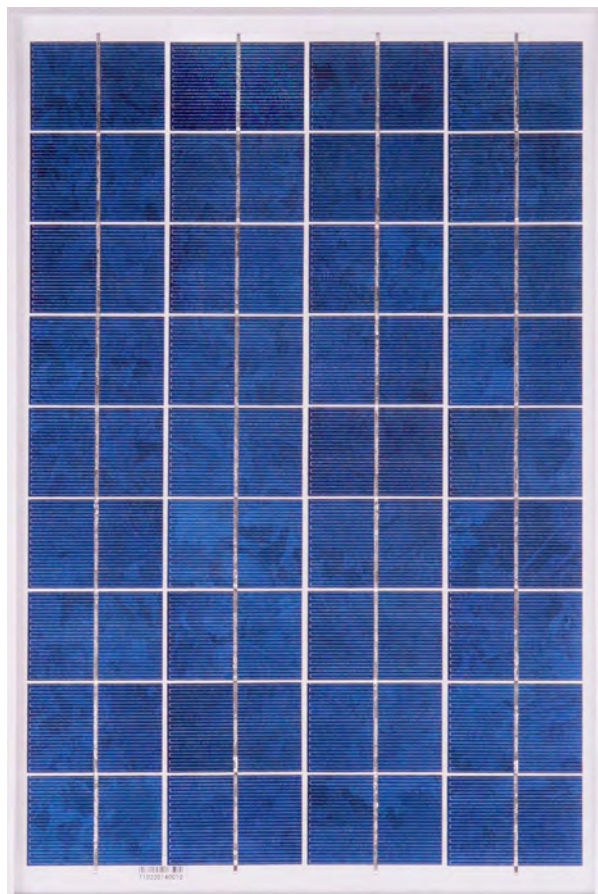


YGE 20 SERIES

YL020P-17b 1/6



ABOUT YINGLI GREEN ENERGY

- Yingli Green Energy Holding Company Limited (NYSE: YGE) is one of the world's largest fully vertically integrated PV manufacturers. With over 2 GW of modules installed globally, we are a leading solar energy company built upon proven product reliability and sustainable performance. We are the first renewable energy company and the first Chinese company to sponsor the FIFA World Cup™.

PERFORMANCE

- High efficiency, polycrystalline solar cells with high transmission and textured glass delivering a module efficiency of up to 10.9%, minimizing installation costs and maximizing the kWh output of your system per unit area.
- Power tolerance of +/-3% minimizing PV system mismatch losses.

QUALITY AND RELIABILITY

- Industry leading in-house manufacturing of polysilicon, ingots, wafers, cells and modules ensures tight control of our material and production quality.
- Robust, corrosion resistant aluminum frame independently tested to withstand wind loads of 2.4 kPa and snow loads of 5.4 kPa ensuring a stable mechanical life for your modules.
- Module packaging optimized to protect product during transportation and minimize on-site waste.
- This type of module is commonly used for the small off-grid system.
- Manufacturing facility certified by TÜV Rheinland to ISO 9001:2008, ISO 14001:2004 and BS OHSAS 18001:2007.

QUALIFICATIONS AND CERTIFICATES

IEC 61215, IEC 61730, UL 1703 and ULC 1703, UL Fire Safety Class C, ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007, SA 8000, PV Cycle



YGE 20 SERIES

ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)			
Module name			YGE 20
Module type			YL020P-17b 1/6
Power output	P_{max}	W	20
Power output tolerances	ΔP_{max}	%	+/- 3
Module efficiency	η_m	%	10.9
Voltage at P_{max}	V_{mpp}	V	17.3
Current at P_{max}	I_{mpp}	A	1.16
Open-circuit voltage	V_{oc}	V	21.3
Short-circuit current	I_{sc}	A	1.32

STC: 1000W/m² irradiance, 25°C T_{module} , AM 1.5g spectrum according to EN 60904-3.
Ave. efficiency reduction of 5% at 200W/m² according to EN 60904-1.

Electrical parameters at Nominal Operating Cell Temperature (NOCT)			
Power output	P_{max}	W	14.5
Voltage at P_{max}	V_{mpp}	V	15.8
Current at P_{max}	I_{mpp}	A	0.92
Open-circuit voltage	V_{oc}	V	19.4
Short-circuit current	I_{sc}	A	1.07

NOCT: open-circuit module operation temperature at 800W/m² irradiance, 20°C $T_{ambient}$, 1m/s wind speed.

THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	46 +/- 2
Temperature coefficient of P_{max}	γ	%/°C	-0.45
Temperature coefficient of V_{oc}	β_{Voc}	%/°C	-0.37
Temperature coefficient of I_{sc}	α_{Isc}	%/°C	0.06

OPERATING CONDITIONS

Max. system voltage	50V _{DC}
Max. series fuse rating	5A
Limiting reverse current	Do not apply external voltages larger than V_{oc} of the module
Operating temperature range	-40 to 85°C
Max. static load, front (e.g., snow and wind)	2400Pa
Max. static load, back (e.g., wind)	2400Pa
Hailstone impact (hailstone diameter / impact velocity)	25mm / 23m/s

CONSTRUCTION MATERIALS

Front cover (material / thickness)	low-iron tempered glass / 3.2mm
Cell (quantity / type / dimensions)	36 / multicrystalline / 78mm x 52mm
Encapsulant (material)	ethylene vinyl acetate (EVA)
Frame (material / color / anodization color)	anodized aluminum alloy / silver / clear

- Due to continuous innovation, research and product improvement, the specifications in this product information sheet are subject to change without prior notice. The specifications may deviate slightly and are not guaranteed.
- The data do not refer to a single module and they are not part of the offer, they only serve for comparison to different module types.

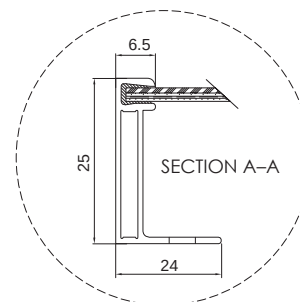
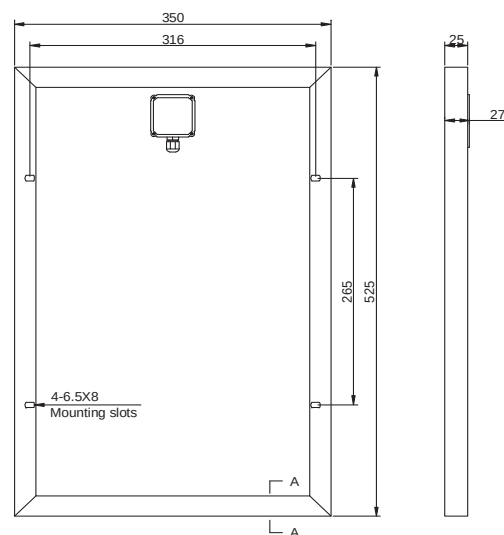
GENERAL CHARACTERISTICS

Dimensions (length / width / height)	525mm / 350mm / 25mm
Weight	2.58 kg

PACKAGING SPECIFICATIONS

Number of modules per box	6
Packaging box dimensions (length / width / height)	570mm / 380mm / 210mm

Unit: mm



Warning: Read the installation manual in its entirety before handling, installing, and operating Yingli Solar module.

Our Partners:

Yingli Green Energy Holding Co. Ltd.

service@yinglisolar.com

0086-312-8929802

YINGLISOLAR.COM

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