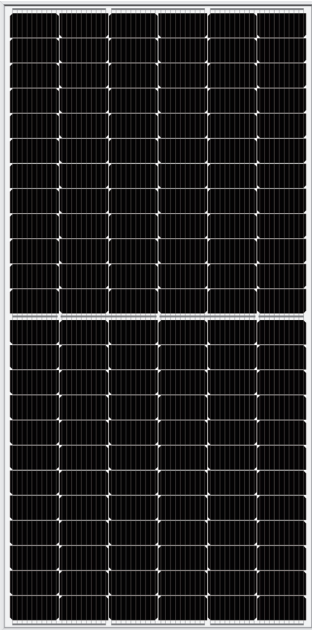


YLM-J
GG
144CELL



DOUBLED STRENGTH FOR MULTIPLIED RELIABILITY

With over two decades of manufacturing experience and millions of PV systems installed worldwide you can trust that our product quality and long term reliability have been proven in the field.



Up to 21.45%

MODULE EFFICIENCY

12 YEAR

PRODUCT WARRANTY

0 to +5W

POWER SELECTION TOLERANCE



Bifacial Power

In contrast to conventional modules, YLM GG modules can generate energy from both sides. As the backside makes use of the reflected and scattered light from the surroundings, these modules could yield significantly more power, depending upon the albedo.



144 Cell Design

With double the standard amount of cells, we have increased the performance of the module. Each cell operates cooler as they now carry just half the amount of current in the same conditions. This design effectively deals with shadow and improves performance by reducing degradation.



Longterm Durability

The multi-busbar cells encapsulated between a double layer of glass can decrease the risk of cell micro-cracks by improving the long term mechanical performance.



Fire Resistant

The double glass construction is our most fire resistant product design achieving an industry leading Fire Class A rating.



Mechanical Performance

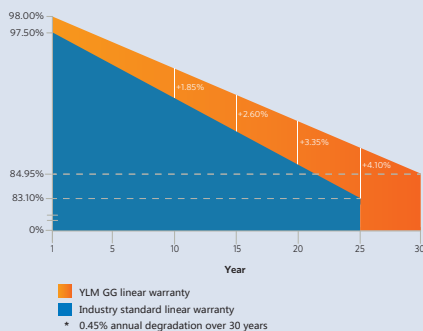
Choose our specially designed aluminium framed "HDF" module for enhanced mechanical performance and more ease of use in traditional installation methods.



Polyolefin(POE) Encapsulation

Polyolefin(POE) hydrophobic encapsulation for increased durability and long term performance in high heat and humid environments.

30 Years Linear Warranty



Yingli Solar

Founded in 1987, Yingli Energy (China) Company Limited, known as "Yingli Solar", is one of the world's oldest leading solar panel manufacturers with the mission to provide affordable green energy for all. Yingli Solar makes solar power possible for communities everywhere by using our global manufacturing and logistics expertise to address unique local challenges.

MODULE TYPE		144DF (144 cell, p-type mono-Si, framed): YLxxxDF72 e/2 (xxx=Pmax)						
Electrical Parameters at STC								
Power output	P _{max}	W	530	535	540	545	550	555
Voltage at P _{max}	V _{Pmax}	V	41.30	41.45	41.60	41.75	41.90	42.05
Current at P _{max}	I _{Pmax}	A	12.84	12.91	12.99	13.06	13.13	13.20
Open-circuit voltage	V _{oc}	V	49.15	49.30	49.45	49.60	49.75	49.90
Short-circuit current	I _{sc}	A	13.76	13.83	13.90	13.97	14.04	14.11
Power output tolerance	ΔP _{max}	W	0 / + 5					
Module efficiency	N _{Pmax}	%	20.48	20.67	20.87	21.06	21.25	21.45

Electrical Parameters at NMOT								
Power output	P _{max'}	W	403.45	407.12	411.12	414.83	418.55	422.29
Voltage at P _{max'}	V _{Pmax'}	V	39.39	39.53	39.67	39.82	39.96	40.10
Current at P _{max'}	I _{Pmax'}	A	10.24	10.30	10.36	10.42	10.47	10.53
Open-circuit voltage	V _{oc'}	V	46.72	46.87	47.01	47.15	47.29	47.44
Short-circuit current	I _{sc'}	A	11.09	11.14	11.20	11.25	11.31	11.37

Bifacial Electrical Parameters at STC*								
Power output	P _{max''}	W	580.09	585.56	591.03	596.50	601.98	607.45
Voltage at P _{max''}	V _{Pmax''}	V	41.30	41.45	41.60	41.75	41.90	42.05
Current at P _{max''}	I _{Pmax''}	A	14.05	14.13	14.21	14.29	14.37	14.45
Open-circuit voltage	V _{oc''}	V	49.15	49.30	49.45	49.60	49.75	49.90
Short-circuit current	I _{sc''}	A	15.06	15.14	15.21	15.29	15.37	15.44

Other Characteristics								
Bifaciality coefficient	φ	%	70 ± 5	Temperature coefficient of I _{sc}	α _{Isc}	% / °C	0.05	
Nominal module operating temperature	NMOT	°C	39 ± 2	Temperature coefficient of V _{oc}	β _{Voc}	% / °C	- 0.28	
Measurement tolerance of Voc and Isc		%	± 3	Temperature coefficient of P _{max}	γ _{Pmax}	% / °C	- 0.35	

STC: 1000 W·m⁻² irradiance, 25 °C cell temperature, AM 1.5 spectrum according to EN 60904-3.
 NMOT: temperature near maximum power point at 800 W·m⁻² irradiance, 20 °C ambient temperature, 1 m·s⁻¹ wind speed.
 *Bifaciality coefficient is 70%, rear irradiance is 135 W·m⁻².

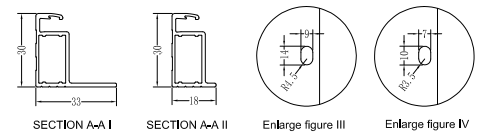
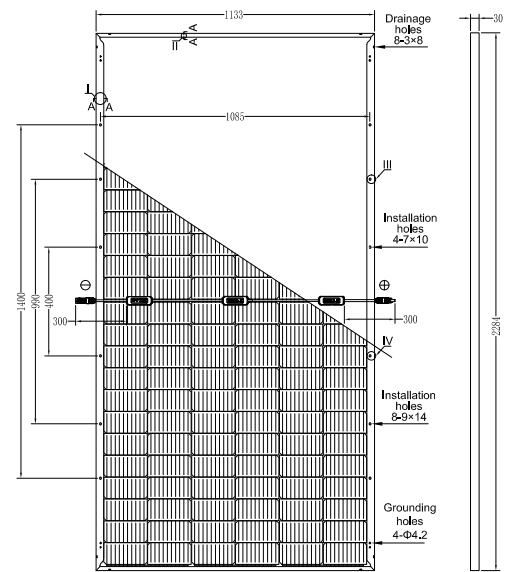
OPERATING CONDITIONS		CONSTRUCTION MATERIALS	
Max. system voltage	1500 V _{DC}	Cell (material / number)	p-type mono-Si / 2 x 6 x 12
Max. series fuse rating*	30 A	Glass (material / thickness)	high transmission semi-tempered glass / 2.0mm x 2
Operating temperature range	- 40 °C to 85 °C	Frame (type)	anodized aluminium alloy
Snow load, front	5400 Pa	Cable (length / cross-sectional area)	± 300 mm, can be customized / 4 mm ²
Wind load, back	2400 Pa	Plug connector (type)	Renhe RHC2 or Yitong YT18-01 or Staubli MC4-Evo2
Hailstone impact (diameter / velocity)	25 mm / 23 m·s ⁻¹	Junction box (type / protection degree)	3 diodes / ≥ IP67

*DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection.

PACKAGING SPECIFICATIONS

Packaging Specifications@144DF	
Dimensions (L / W / H)	2284 mm / 1133 mm / 30 mm
Weight	32.5 kg
Number of modules per pallet	36
Number of pallets per 40' container*	20
Packaging pallets dimensions (L / W / H)	2300 mm / 1110 mm / 1245 mm
Pallet weight	1225 kg

*Truck transport is prohibited to exceed its maximum load.



Figure@144DF unit: mm

QUALIFICATIONS & CERTIFICATES

IEC 61215, IEC 61730, CE, ISO 9001: 2015, ISO 14001: 2015, BS OHSAS 18001: 2007



Certificates are held by Yingli Energy (China) Co., Ltd., a wholly owned subsidiary of Yingli Green Energy Holding Co., Ltd.

- 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 does not refer to a single module and it is not part of the offer, it only serves to enable comparisons between different module types. The company reserves the final right to explain it's data.

Proudly made in China



Warning: Read the Installation and User Manual in its entirety before handling, installing and operating Yingli Solar modules.

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