



KVA-US590

Forge Series High Efficiency N-Type TOPcon Bifacial

590W MAXIMUM POWER OUTPUT

(0,+4.99)W POSITIVE POWER TOLERANCE

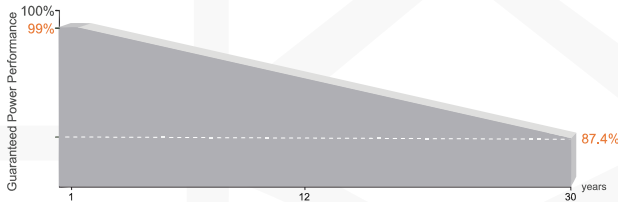
22.84% MAXIMUM EFFICIENCY

590W
PRODUCT RANGE



LINEAR PERFORMANCE WARRANTY

- 15 Year** Product Warranty
- 30 Year** Linear Power Warranty
- <1%** First Year Power Degradation
- <0.4 %** Year 2-30 Power Degradation



HIGHER POWER OUTPUT

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR



PRODUCED IN THE UNITED STATES

Assembled at our state-of-the-art facility in the USA, ensuring quality and reliability at every step



HIGHER MODULE CONVERSION EFFICIENCY

Higher module output up to 590W with module efficiency up to 22.84%



TOPcon BIFACIAL SOLAR CELLS

144 cells



LOW-LIGHT PERFORMANCE

Advanced glass and surface texturing allow for excellent performance in low-light environments



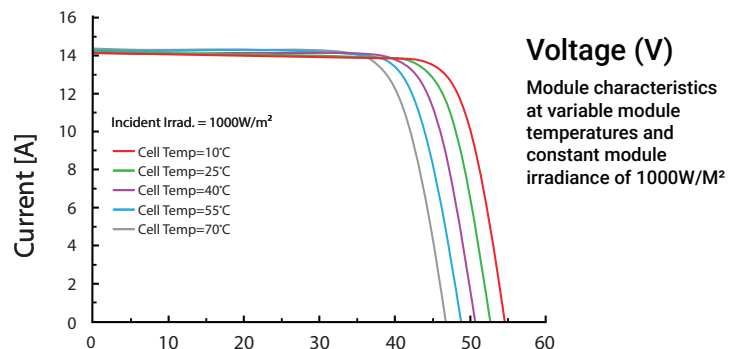
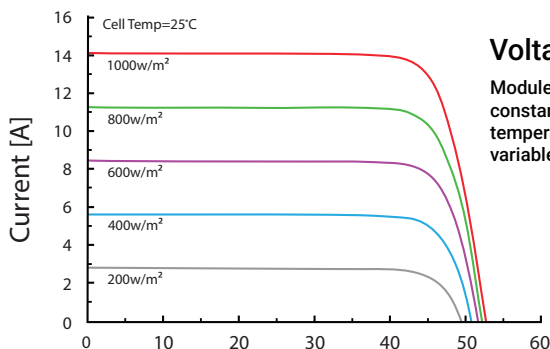
CERTIFICATIONS

Quality System and Product Certification

ISO9001 / ISO14001 / ISO45001



CURRENT-VOLTAGE CURVES:



TOPcon 144-CELL BIFACIAL

ELECTRICAL PARAMETERS		
Module Type: BHI-US590	STC	BNPI
Maximum Power(Wp)	590W	647W
Open Circuit Voltage(Voc)	52.50V	52.58V
Short Circuit Current(Isc)	14.19A	15.55A
Maximum Power Voltage(Vm)	43.80V	43.88V
Maximum Power Current(Imp)	13.48A	14.74A
Module Efficiency	22.84%	
Maximum Series Fuse	25A	
Power Tolerance	(0, +4.99)W	
Number Of Diode	3	
Standard Test Conditions	1000W/M², 25°C, AM1.5	
Maximum System Voltage	1500V/DC	
Temperature-Coefficient Isc	+0.046%/°C	
Temperature-Coefficient Voc	-0.25%/°C	
Temperature-Coefficient Pmax	-0.29%/°C	
Operating Temperature	-40°C...+85°C	
Nominal Operating Cell Temperature	45±2°C	
Bifaciality	80%±5%	
Mechanical Load	5400 Pa (Front Side) 2400 Pa (Back Side)	

MECHANICAL CHARACTERISTICS	
Front/Back Cover (Material / Thickness)	AR coating low-iron semi-tempered glass /2.0mm
Cell (Quantity / Dimensions / Material)	144 / 182x105x2mm / N-Type TOPcon Bifacial
Frame	aluminum hollow-chamber frame on each side anodized aluminum alloy
Junction Box (Protection Degree)	≥IP68
Cables & Plug Connectors	4mm², 250mm(+)/350mm(-) in length, length can be customized
Module Dimensions (L / W / H)	2278x1134x30mm
Module Weight	32.0kg
Application Class	Class A
Electrical Protection Class	Class II
Fire Safety Class	Class A

PACKING				
Container Size	Units/Pallet (PCS)	Weight/Pallet (KG)	Pallet Measurement (in)	Units/Container (PCS)
40HQ	36			720

