



**XN54KF** PHOTOVOLTAIC MODULES

# XN54SERIES HALF-CUT PV MODULES

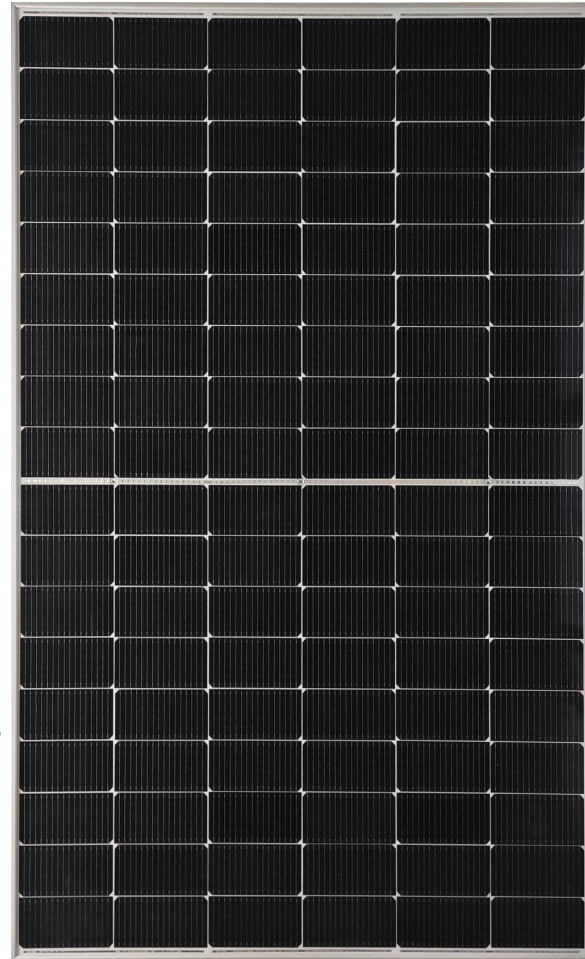
PEAK POWER: 435-445 Wp

## FEATURES INCLUDE:

- 108 half-cut N-Topcon cells comprised by double layers of glasses.
- Positive power tolerance of 0~+3% improves system performance.
- Industry-leading module efficiency: maximum efficiency of 22.79%.
- Tested up to 5400Pa for maximum load resistance.
- Verified resistance against PID effects.
- Progressive Power Warranty guarantees 87.4% of rated power at 30 years.
- Manufactured globally with world-class quality standards

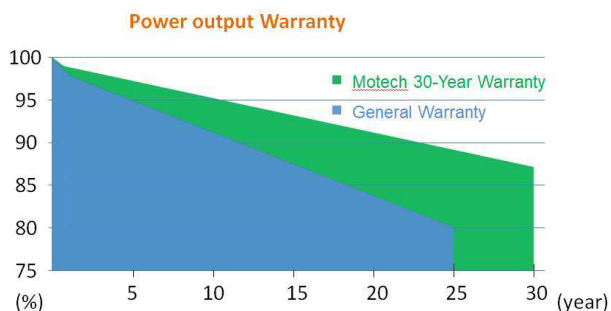
## QUALITY, RELIABILITY, AND KWH YIELD

MOTECH modules are powered by industry acknowledged high performance, reliable silicon cells. 25 years of experience in solar module engineering and design, along with rigorous durability and performance tests, ensure reliable lifetime performance and maximum kWh yield.



## 30-YEAR PROGRESSIVE WARRANTY\*

- 30-year progressive power warranty
- 12-year warranty on materials and workmanship

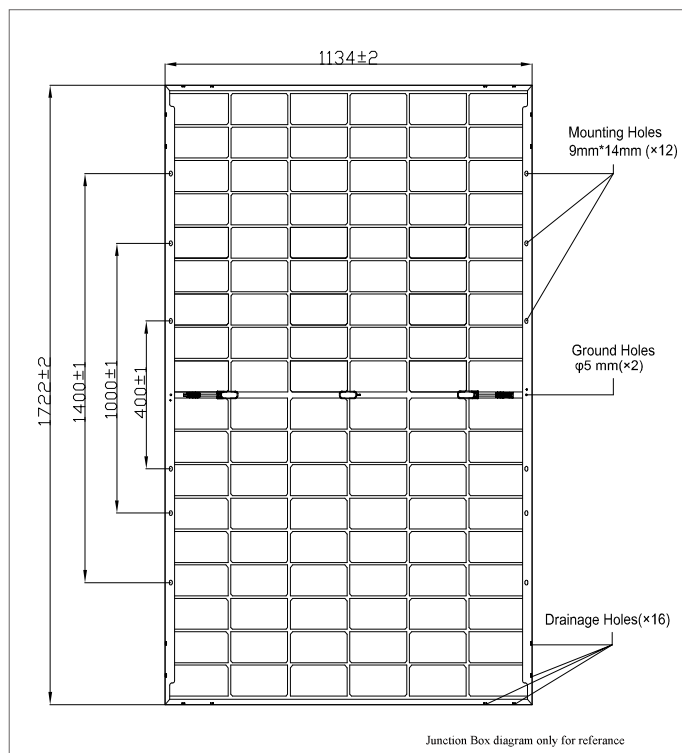


## CERTIFICATIONS & STANDARDS\*





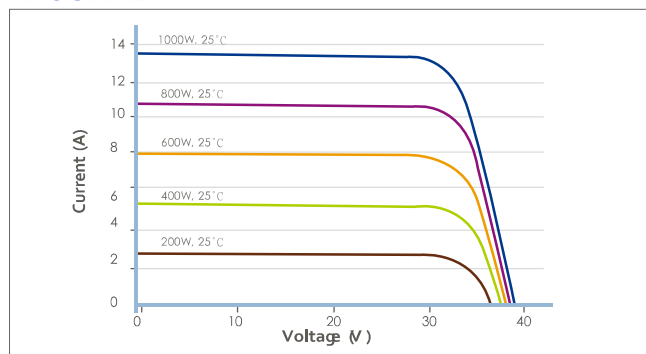
## PHYSICAL CHARACTERISTICS



## PHYSICAL DESIGN PROPERTIES

Dimension	1722×1134×30mm
Weight	24.5 kg±5%
Front Glass	2.0 mm Semi-tempered Coated PV Glass
Back Glass	2.0 mm Glazed Glass
Junction Box	Protection class IP68
Output Cables	Φ4.0mm <sup>2</sup> , 300mm/300mm, or customized length
Connectors	MC4 Compatible
Packing	36 pcs/pallet, 936 pcs/container(40'HQ)

## IV CURVE



## ELECTRICAL PERFORMANCE

### XN54KF-435

### XN54KF-440

### XN54KF-445

Electrical Performance @ STC (Power Measurement Uncertainty±3%)				
Maximum Power Pmax[Wp]		435	440	445
Max. Power Voltage Vmpp(V)		33.86	34.11	34.34
Max. Power Current Impp(A)		12.85	12.90	12.96
Open Circuit Voltage Voc(V)		39.16	39.40	39.63
Short Circuit Current Isc(A)		13.52	13.57	13.63
Module Efficiency (%)		22.28%	22.53%	22.79%

Power Gain Electrical Performance @ STC (Power Measurement Uncertainty±3%)				
5%	Pmax[Wp]	456	462	467
	Module Efficiency (%)	23.35%	23.66%	23.92%
15%	Pmax[Wp]	500	506	511
	Module Efficiency (%)	25.60%	25.91%	26.19%
25%	Pmax[Wp]	543	550	556
	Module Efficiency (%)	27.81%	28.16%	28.47%

## ELECTRICAL PERFORMANCE PARAMETERS

Isc Temperature Coefficient	$\alpha$ (%/°C)	+0.045	Maximum Series Fuse Rating	30A
Voc Temperature Coefficient	$\beta$ (%/°C)	-0.25	Max. System Voltage (IEC)	1500V
Pmax Temperature Coefficient	$\gamma$ (%/°C)	-0.29	Nominal Operating CellTemp.(NOCT)	45°C ± 2°C

IV parameters are rated at Standard Test Conditions (Irradiance of 1000 W/m<sup>2</sup>, AM 1.5, cell temperature 25°C). All measurements are guaranteed at the laminate leads. NOCT is measured at 800 W/m<sup>2</sup>, 20°C ambient, and 1 m/s windspeed. Specifications are subject to change without notice.

Motech reserves the rights of final interpretation and revision on this datasheet.



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