

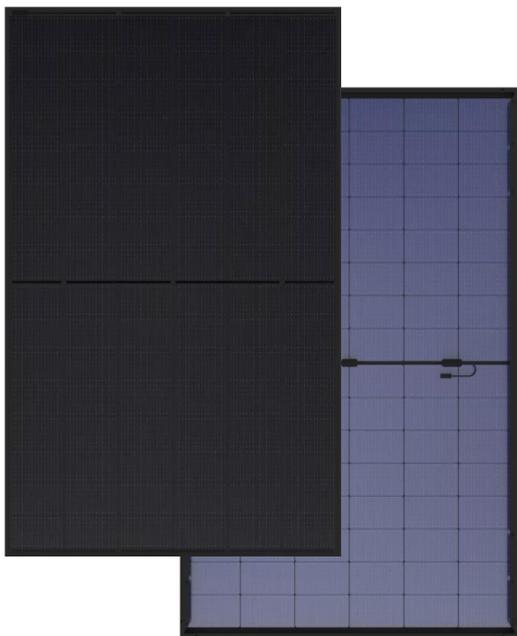
Jupiter Pro

HT48-18X+(ND)-F Full Black

High Efficiency Lower LID and TOPCon cell with Half-cut Technology
Big Size : Cell 182 × 105mm Monocrystalline

440W / 445W

450W / 455W / 460W



- Module Efficiency
23.0%
- No. of Cells
96 (6 × 16)
- Weight
23.0±0.5kg
- Dimensions
1762 × 1134 × 30mm



10-30% Additional Power Generation

10-30% additional power generation comparing with conventional P-type module



Lower LID (Light Induced Degradation)

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance



Lower LCOE

Higher power output and lower BOS cost



Better Weak Illumination Response

Higher power output even under low-light environment



Better Temperature Coefficient

Higher power generation under normal working conditions



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal)

Comprehensive and First-rate Certification System

IEC61215: 2021 . IEC61730: 2023 . UL61730: 2017 . IEC62804: 2015
ISO9001 . ISO14001 . and . ISO45001



Jupiter Pro

Better Choice For Higher Efficiency



Electrical Characteristics

Module	HT48-18X+(ND)-F				
Maximum Power at STC (Pmax)	440W	445W	450W	455W	460W
Open - Circuit Voltage (Voc)	35.30V	35.50V	35.70V	35.90V	36.10V
Short - Circuit Current (Isc)	15.89A	15.97A	16.05A	16.13A	16.20A
Optimum Operating Voltage (Vmp)	29.45V	29.60V	29.75V	29.90V	30.05V
Optimum Operating Current (Imp)	14.95A	15.04A	15.13A	15.22A	15.31A
Module efficiency	22.0%	22.3%	22.5%	22.8%	23.0%
Power Tolerance	0 ~ +3%				
Maximum System Voltage	1500V DC (UL / IEC)				
Maximum Series Fuse Rating	35A				
Operating Temperature	-40 C to +85 C				

* STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5
Optional black frame or white frame module according to customer requirements

NMOT

Module	HT48-18X+(ND)-F (Bifaciality 80±10%)				
Maximum Power	332W	336W	340W	344W	347W
Open - Circuit Voltage (Voc)	33.30V	33.50V	33.60V	33.80V	34.00V
Short - Circuit Current (Isc)	12.83A	12.89A	12.96A	13.02A	13.08A
Optimum Operating Voltage (Vmp)	27.50V	27.60V	27.80V	28.00V	28.10V
Optimum Operating Current (Imp)	12.07A	12.16A	12.22A	12.28A	12.34A
NMOT	45±2 C				

* NMOT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Mechanical Characteristics

Solar Cells	Monocrystalline 182 × 105mm
No. of Cells	96 (6 × 16)
Dimensions	1762 × 1134 × 30mm
Weight	23.0±0.5kg
Glass (Front/Back)	High transmission coated tempered glass; thickness: 2.0mm
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm ² (UL / IEC); length: (+)400mm, (-)200mm / customized length
Connectors	MC4-EVO2/MC4 Compatible
Packaging Configuration	36pcs/box, 936pcs/40'HQ container

Temperature Characteristics

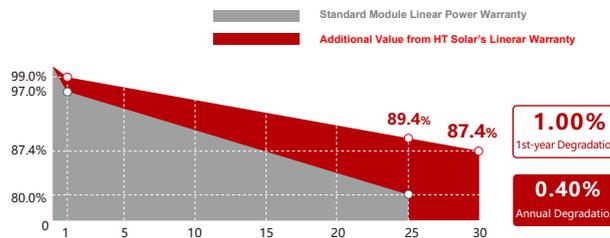
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C

Warranty

15 - years
product warranty

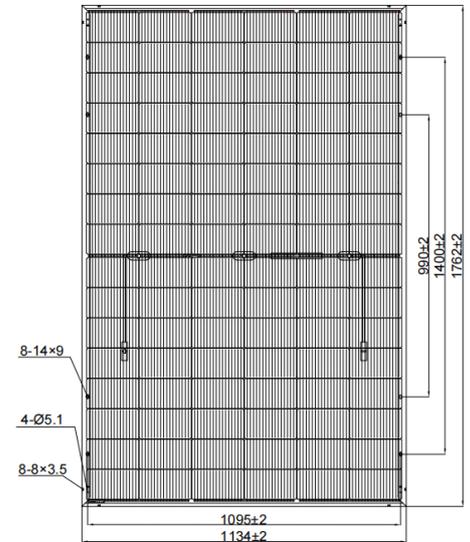
30 - years
warranty on power output

Specific information is referred to the product quality guarantee



The module recycling should be carried out by the professional institutions at the end of module life cycle

Engineering Drawing



IV Curves

