



JHPV TECH

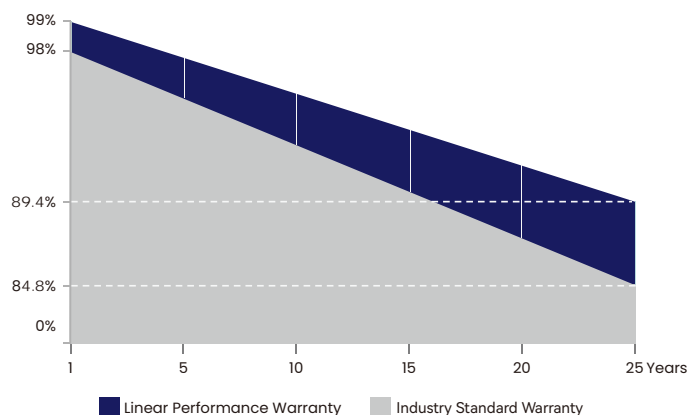
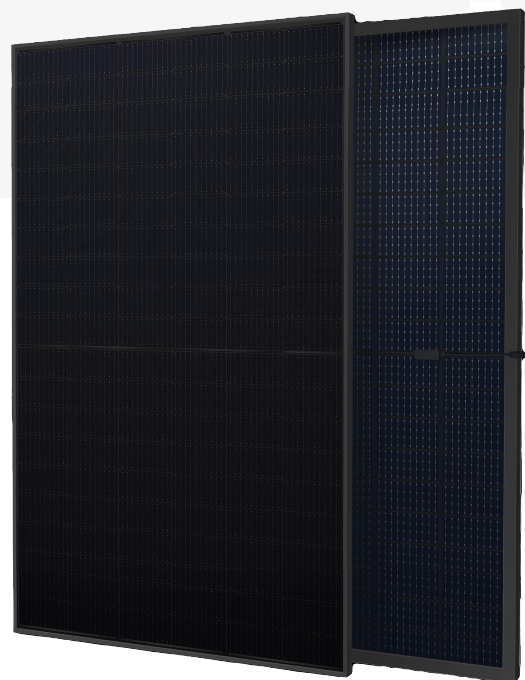
WWW.JHPVTECH.COM

JH-M10DF120C2 440~460W

22.8% Efficiency

440~460W (182x169.2 mm Half-Cut Cell) 120 pcs

N-TYPE Full black bifacial



15 Years
Material & Craft
Quality
Assurance

30 Years
84.8% Output
Power
Guarantee

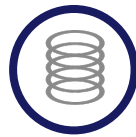
KEY FEATURES HIGHLIGHTS



Mono MBB half cut
Original European Parts



EU Standard
European Quality
Control



PID Resistance
High stability and torsion
free with Wave Shape

PRODUCT CERTIFICATIONS



Production process
reliability test
electro-luminance
inspection



AR coating
tolerance and lower
resistive loss



Excellent Durability
resistant to salt mist, ammonia,
dust and sand, snail trail.



Reduce BOS cost
increase ROI
Low temp coefficient
(PMax) for higher output



Wide Applications
Durability against Extreme
Environmental Conditions



Lower Losses
Multi Busbar Technology for
better Light trapping

JH-M10DF120C2 440~460W



Electrical parameters at Standard Test Conditions (STC*) & Nominal Operating Cell Temperature (NOCT*)

| Module Type | 440W / 323W | 445W / 328W | 450W / 333W | 455W / 338W | 460W / 341W |
|--|---------------|---------------|---------------|---------------|---------------|
| Test Environment | STC / NOCT | STC / NOCT | STC / NOCT | STC / NOCT | STC / NOCT |
| Power output tolerances P _{max} (W) | (0,+5) | (0,+5) | (0,+5) | (0,+5) | (0,+5) |
| Module efficiency(%) | 21.8 | 22.0 | 22.3 | 22.5 | 22.8 |
| Voltage at P _{max} V _{mpp} (V) | 36.59 / 34.25 | 36.80 / 34.45 | 37.03 / 34.67 | 37.29 / 34.91 | 37.55 / 35.15 |
| Current at P _{max} I _{mp} (A) | 11.89 / 9.57 | 11.96 / 9.63 | 12.02 / 9.67 | 12.07 / 9.71 | 12.12 / 9.75 |
| Open-circuit voltage V _{oc} (V) | 43.18 / 40.76 | 43.46 / 41.02 | 43.72 / 41.27 | 44.06 / 41.59 | 44.31 / 41.83 |
| Short-circuit current I _{sc} (A) | 12.53 / 10.12 | 12.58 / 10.16 | 12.64 / 10.21 | 12.68 / 10.24 | 12.73 / 10.29 |

*STC: 1000 W·m⁻² irradiance, 25°C cell temperature, AM 1.5 spectrum according to EN 60904-

*NOCT: open-circuit module operation temperature at 800 W·m⁻² irradiance, 20°C ambient temperature, 1 m·s⁻¹ wind speed.

3.

GENERAL CHARACTERISTICS

| | |
|------------------------|--------------------------|
| Dimensions (L / W / H) | 1762 mm / 1134mm / 30 mm |
| Weight | 28 kg |

PACKAGING SPECIFICATIONS

| | |
|-------------------------------------|----|
| Number of modules per pallet | 36 |
| Number of pallets per 40' container | 26 |

THERMAL CHARACTERISTICS

| | | | |
|---|------|--------|--------|
| Nominal operating cell temperature | NOCT | °C | 45 ± 2 |
| Temperature coefficient of P _{max} | γ | % / °C | -0.29 |
| Temperature coefficient of V _{oc} | β | % / °C | -0.25 |
| Temperature coefficient of I _{sc} | α | % / °C | 0.045 |

*NOCT: open-circuit module operation temperature at 800 W·m⁻² irradiance, 20°C ambient temperature, 1 m·s⁻¹ wind speed.

OPERATING CONDITIONS

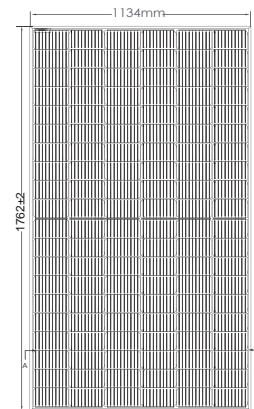
| | |
|---|------------------------------|
| Max. system voltage | 1500 V _{oc} |
| Max. series fuse rating* | 25 A |
| Operating temperature range | -40°C to 85°C |
| Max. static load, front (e.g., snow) | 5400 Pa |
| Max. static load, back (e.g., wind) | 2400 Pa |
| Max. hailstone impact (diameter/velocity) | 25 mm / 23 m·s ⁻¹ |

*DO NOT CONNECT FUSE IN COMBINER BOX WITH TWO OR MORE STRINGS IN PARALLEL CONNECTION.

CONSTRUCTION MATERIALS

| | |
|---|---|
| Cell (material / quantity) | monocrystalline silicon / 6 x 20 |
| Glass (material / thickness) | low-iron tempered glass / 2 mm + 2 mm |
| Frame (material) | anodized aluminum alloy |
| Junction box (type / protection degree) | 3 bypass diodes / ≥ IP68 |
| Cable (length / cross-sectional area) | ± 300 mm or customized length / 4 mm ² |

BACK VIEW (Units: mm)



SECTION A-A



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



NINGBO JING HONG ENERGY TECHNOLOGY CO., LTD.

Email: Sales@jhpvtech.com

Web: <http://jhpvtech.com>

Address: No. 1 Xinsi Road, Xinbei District, Changzhou City, Jiangsu Province, P.R. China



▲ 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.