



BIPRO

TM3G48M **96-c**

435 - 455W

Bifacial Dual Glass

16BB Half-cut N-type



SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



PERFORMANCE WARRANTY

Guaranteed Power

KEY FEATURES



16BB Half-cut Cell Technology

Lower LID/LeTID degradation and better low light performance
Attenuation $\leq 1\%$ (1st year) / $\leq 0.4\%$ (Linear)



Bifacial TOPCon Cell Technology

Dual-sided power generation gain from back side depending on albedo, significantly reduce LCOE



192 hours Anti-PID test



No water-permeability

and high wear-resistance, can be widely used in high-humid, windy and dusty area



High waterproof level

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2024.04.10

ELECTRICAL CHARACTERISTICS

| | 435 | 330 | 440 | 334 | 445 | 338 | 450 | 342 | 455 | 346 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| V_{oc} (V) | 29.22 | 27.50 | 29.52 | 27.70 | 29.79 | 28.00 | 30.09 | 28.20 | 30.34 | 28.40 |
| V_{mp} (V) | 14.89 | 12.00 | 14.91 | 12.05 | 14.94 | 12.09 | 14.96 | 12.12 | 15.00 | 12.17 |
| V_{oc} (V) | 34.98 | 33.20 | 35.20 | 33.40 | 35.42 | 33.60 | 35.64 | 33.80 | 35.85 | 34.00 |
| V_{mp} (V) | 15.76 | 12.71 | 15.80 | 12.74 | 15.83 | 12.76 | 15.86 | 12.79 | 15.90 | 12.82 |
| η (%) | 21.80 | 22.00 | 22.30 | 22.50 | 22.80 | | | | | |

Test conditions: 1000 W/m², L1.5, L_{ref} = 1.5m, T_{cell} = 25°C, τ_{ref} = 0 +5, τ_{cell} = 3%
 Test conditions: 800 W/m², L1.5, L_{ref} = 1.5m, T_{cell} = 20°C, τ_{ref} = 0 +5, τ_{cell} = 3%

REAR SIDE POWER GAIN(REFERENCE TO 445W FRONT)

| | 5% | 10% | 15% | 20% | 25% |
|--------------|-------|-------|-------|-------|-------|
| V_{oc} (V) | 467 | 490 | 512 | 534 | 556 |
| V_{mp} (V) | 29.79 | 29.79 | 29.79 | 29.79 | 29.79 |
| V_{oc} (V) | 15.69 | 16.43 | 17.18 | 17.93 | 18.68 |
| V_{mp} (V) | 35.42 | 35.42 | 35.42 | 35.42 | 35.42 |
| V_{oc} (V) | 16.62 | 17.41 | 18.20 | 19.00 | 19.79 |

MECHANICAL CHARACTERISTICS

| | |
|-------------|---|
| Material | N-type Mono-Crystallin (16Busbar) |
| Quantity | 96pcs in series (6*16) |
| Dimensions | 1762*1134*30mm (69.37*44.65*1.18inches) |
| Weight | 24.7kg (54.45lbs.) |
| Front Glass | 2.0mm AR Coating Semi-tempered Glass |
| Back Glass | 2.0mm Glazed Semi-tempered Glass |
| Frame | Anodized Aluminium Alloy |
| Protection | IP68, 3 Bypass Diodes |
| Wiring | 4mm ² (IEC), 12AWG(UL) 350mm(+),250mm(-) or Customized Length |
| Mounting | T01/LJQ-3-CSY/MC4/MC4-EV02 |

APPLICATION CONDITIONS

| | |
|-------------|-------------------------------------|
| Voltage | 1500V/DC |
| Temperature | -40°C~+85°C |
| Power | 35A |
| Class | Class II |
| Pressure | Front side 5400Pa, Back side 2400Pa |
| Humidity | 80%±5% |

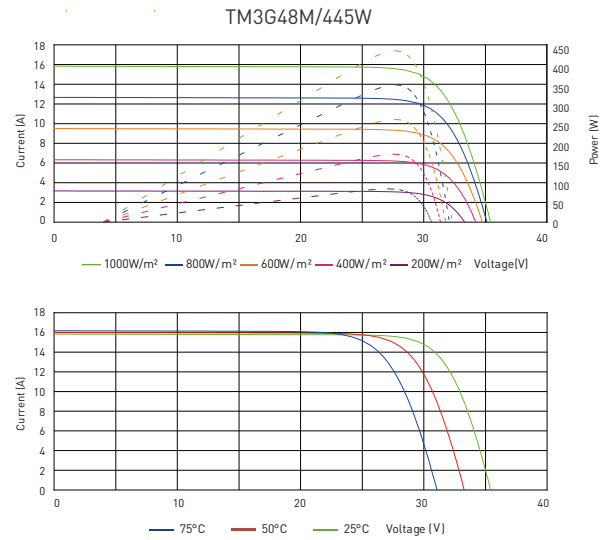
TEMPERATURE CHARACTERISTICS

| | |
|-----------------|------------|
| V_{oc} (V) | -0.29%/°C |
| V_{mp} (V) | -0.24%/°C |
| V_{oc} (V) | +0.043%/°C |
| T_{cell} (°C) | 43±2°C |

PACKING CONFIGURATION

| | | |
|---------------|-----|---------|
| Quantity | 36 | 36(USA) |
| Quantity (40) | 936 | 720 |

TECHNICAL DRAWINGS



TECHNICAL DRAWINGS



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