

# Polycrystalline PV Module MUL-8P-290W-60

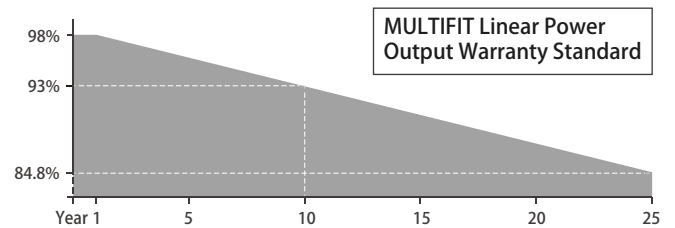
| Power Output | Power Tolerance | Maximum Efficiency |
|--------------|-----------------|--------------------|
| 270-290W     | 0~+5W           | 17.8%              |

- Superior silicon cells, High efficiency solar panel, Most cost-effective and ideal option for power station.
- Excellent encapsulating materials and strict production process to ensure highly resistance against PID (Potential Induced Degradation) of PV module.
- High transparent self-clean tempered glass to increase the light adoption and effectively reduce the power loss which is caused by dust.
- Pass the test for weather resistance in harsh environments (salt mist, ammonia corrosion and sand)
- Reinforced frame with more remarkable loading capacity.
- 1500V highest affordable system voltage to effectively reduce the BOS cost.



## MULTIFIT Offers Long-term Quality Assurance

- 12 years Product Warranty
- 25 years Linear Power Output Warranty
- The attenuation of the power output in the first year  $\leq 2\%$ , the annual average attenuation after the first year  $\leq 0.55\%$



\* More details please read the guarantee letter.

## Product Certification & Management Certification

- IEC61215/IEC61730/IEC61701/IEC62716
- ISO 9001:Quality Management System
- ISO 14001:Environment Management System
- ISO 45001:Occupation Health Safety Management System



## MUL-8P-290W-60

### Electrical performance parameters (STC)

|                             |         |       |      |      |      |      |
|-----------------------------|---------|-------|------|------|------|------|
| Power Output                | Pmax(W) | 270   | 275  | 280  | 285  | 290  |
| Rated Power Maximum Voltage | Vmp(V)  | 31.7  | 32.0 | 32.3 | 32.5 | 32.8 |
| Rated Power Maximum Current | Imp(A)  | 8.52  | 8.61 | 8.71 | 8.79 | 8.85 |
| Open Circuit Voltage        | Voc(V)  | 38.8  | 39.1 | 39.4 | 39.6 | 39.9 |
| Short Circuit Current       | Isc(A)  | 9.09  | 9.15 | 9.26 | 9.31 | 9.45 |
| Module Efficiency           | (%)     | 16.0  | 16.9 | 17.2 | 17.5 | 17.8 |
| Power Tolerance             | (W)     | 0~+5W |      |      |      |      |

\* STC : 1000W/m2 irradiance, 25° C module temperature, AM1.5 spectrum.

### Electrical performance parameters (NMOT)

|                             |          |        |        |        |        |        |
|-----------------------------|----------|--------|--------|--------|--------|--------|
| Power output                | Pmax (W) | 201.02 | 204.45 | 207.90 | 211.39 | 215.92 |
| Rated Power Maximum Voltage | Vmp (V)  | 28.80  | 29.00  | 29.20  | 29.40  | 29.70  |
| Rated Power Maximum Current | Imp (A)  | 6.98   | 7.05   | 7.12   | 7.19   | 7.27   |
| Open Circuit Voltage        | Voc (V)  | 35.60  | 35.80  | 36.00  | 36.10  | 36.90  |
| Short Circuit Current       | Isc (A)  | 7.50   | 7.57   | 7.64   | 7.70   | 7.83   |

\* NMOT:800W/m2 irradiance, 20°C module temperature, 1m/s wind speed.

### Structure Features

|                             |  |
|-----------------------------|--|
| Solar Cell                  | POLY   |
| Solar Cell Array            | 60 pcs   |
| Module Dimension            | 1666×1002×35mm   |
| Weight                      | 18.5 kg  |
| Glass                       | 3.2 mm (0.13 inches) highly transparent anti-reflection coating tempered glass |
| Back sheet                  | White  |
| Frame                       | Anodized Aluminum Alloy  |
| Junction Box                | IP68 rated   |
| Cable                       | 4mm <sup>2</sup> L=900 mm、PV cable   |
| Diode Quantity              | 3  |
| Wind Pressure/Snow Pressure | 2400pa / 5400pa  |
| Connector                   | MC4 Compatible   |

\* More details please read the installation manual.

### Temperature Characteristics

|                                       |            |
|---------------------------------------|------------|
| Solar Cells Rated Working Temperature | 44±2°C     |
| Temperature Coefficient (Isc)         | +0.057%/°C |
| Temperature Coefficient (Voc)         | -0.31%/°C  |
| Temperature Coefficient (Pmax)        | -0.39%/°C  |

### Maximum Ratings

|                            |                      |
|----------------------------|----------------------|
| Working Temperature        | -40~+85°C            |
| Maximum System Voltage     | 1000V DC<br>1500V DC |
| Maximum Fuse Rated Current | 15A                  |

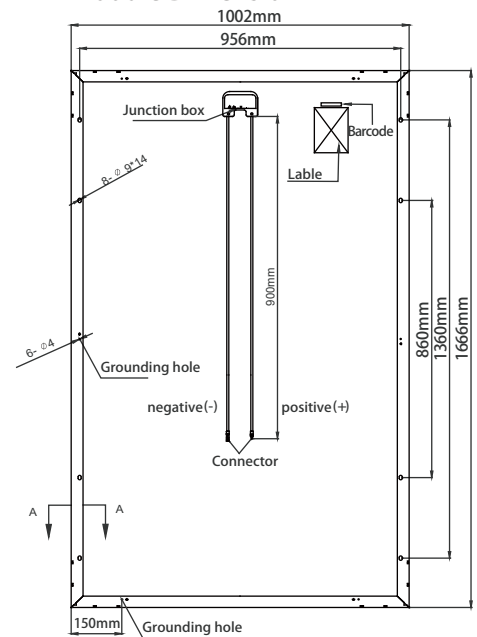
### PACKAGING

|                              |          |
|------------------------------|----------|
| Number of modules per pallet | 31 pcs   |
| 17.5*2.8m Flatbed loading    | 1488 pcs |
| 13.0*2.35m Flatbed loading   | 868 pcs  |
| 20GP Standard container      | 372 pcs  |
| 40HQ Standard container      | 868 pcs  |

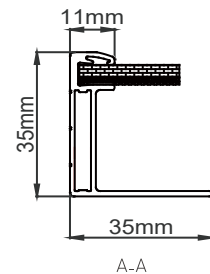
### Optional

|                        |  |
|------------------------|--|
| Connector              | <input type="checkbox"/> Original MC4                                |
| Cable length           | <input type="checkbox"/> 1000mm <input type="checkbox"/> 900mm       |
| Frame                  | <input type="checkbox"/> Black                                       |
| Solar Module Dimension | <input type="checkbox"/> 1666x1002x40mm                              |
| Back sheet color       | <input type="checkbox"/> Black <input type="checkbox"/> Transparency |

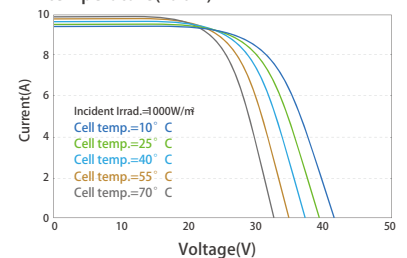
### Module Dimension



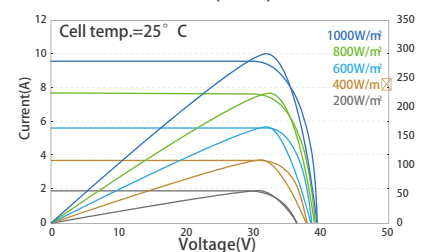
### Back view



### I-V curves of module under different temperature(290w)



### I-V curves/P-V curves of module under different irradiation(290w)



Power measurement error +/-3%