

THUNDER ENERGY SERVICES

Storm 178W

Flexible Solar Panel | Electrical Ratings

Electrical Characteristics (STC)

| Parameter | Value |
|-----------------------------|-----------------|
| Cell Type | Monocrystalline |
| Peak Power (Pmax) | 178 Wp |
| Module Efficiency | 25% |
| Power Tolerance | ±5% |
| Open Circuit Voltage (Voc) | 34.0 V ±5% |
| Max. Power Voltage (Vmp) | 30.0 V |
| Short Circuit Current (Isc) | 6.23 A ±5% |
| Max. Power Current (Imp) | 5.94 A |

STC: 1000 W/m², cell temp. 25°C, AM 1.5

NOCT Performance Values

| Parameter | Value |
|-----------------------------|---------|
| Peak Power (Pmax) | 166.6 W |
| Open Circuit Voltage (Voc) | 32.2 V |
| Max. Power Voltage (Vmp) | 28.4 V |
| Short Circuit Current (Isc) | 6.29 A |
| Max. Power Current (Imp) | 5.86 A |

NOCT: 800 W/m², ambient 20°C, wind 1 m/s

Temperature Coefficients

| Parameter | Value |
|-----------|------------|
| Pmpp | -0.32%/°C |
| Voc | -0.26%/°C |
| Isc | +0.046%/°C |

Certification

| Parameter | Value |
|-----------------|---------------------|
| Test Laboratory | TUV NORD (Hangzhou) |
| Certificate No. | 4478025406749-033 |

Mechanical & General

| Parameter | Value |
|-------------------------|-------------------------------|
| Dimensions (L x W x D) | 1170 x 820 x 3 mm |
| Max. Series Fuse Rating | 10 A |
| Min. Design Load | ±1600 Pa |
| Max. Temperature [T98] | 70 °C |
| Max. System Voltage | 1500 V DC |
| IP Rating | IP67 |
| Bypass Diodes | 2 pcs |
| Cable | 600 mm, 2x2.5 mm ² |

Mechanical Drawing

