

SUN EARTH®

PV-MODULE 285 W_p

POLYCRYSTALLINE TPB 156×156-72-P



- HIGH PERFORMANCE SILICON MODULES
- CERTIFIED WITH IEC STANDARDS
- 100 % INTEGRATED QUALITY CONTROL BY SiG SOLAR GMBH
- GERMAN PERFORMANCE AND PRODUCT WARRANTY
- 10 YEARS PRODUCT WARRANTY
- 25 YEARS 80 % PERFORMANCE WARRANTY
10 YEARS 90 % PERFORMANCE WARRANTY
- POWER TOLERANCE -0W UP TO +5W
- MODULE EFFICIENCY 14,7 % (285 W_p)
- SUN EARTH IS PV CYCLE MEMBER (2012)



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SUN EARTH by **SiG**
Energie natürlich mit Service **SOLAR**

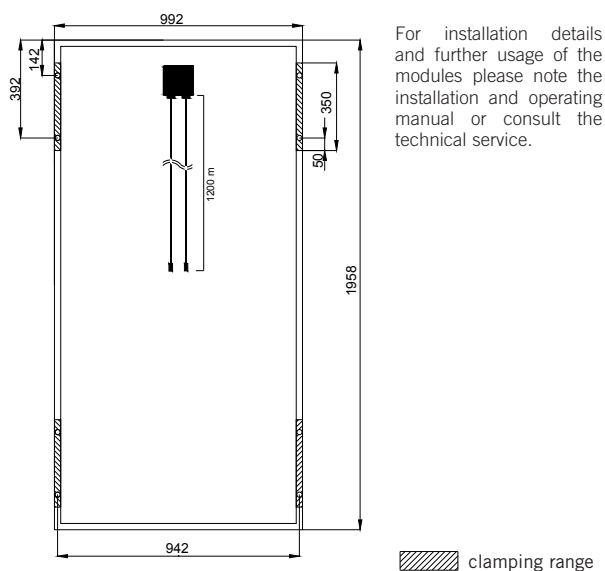
TECHNICAL DATA

SUN EARTH®

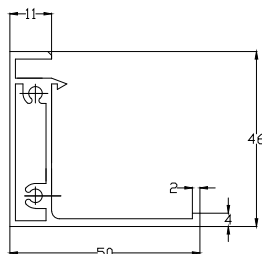
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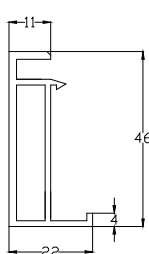
DIMENSIONS



Frame long side



Frame short side



LIMITS

| | |
|--------------------------------------|---------------------|
| Max. system voltage (IEC): | 1000 VDC |
| Max. reverse-current I_R : | 16 A |
| Operating temperature (environment): | -40 °C up to +85 °C |
| Max. hail resistance: | 25 mm at 23 m/s |
| Max. wind resistance: | 2400 Pa |
| Max. snow load (front): | 5400 Pa |
| Application class: | A |
| Fire resistance class: | C |
| Safety class: | II |

TRANSPORT INFORMATION

| | |
|-----------------------------------|--------------------------|
| Packaging unit: | 20 per carton |
| Packaging unit size: | (1990 x 1030 x 980) mm |
| Packaging unit weight: | 490 kg |
| Packaging unit per 40' container: | 22 cartons (440 modules) |

ELECTRICAL DATA (STC)

| | |
|-------------------------------------|--------|
| Max. power (P_{mpp}): | 285 W |
| Max. voltage (U_{mpp}): | 35,1 V |
| Max. current (I_{mpp}): | 8,12 A |
| Open circuit voltage (U_{oc}): | 44,1 V |
| Short circuit current (I_{sc}): | 8,51 A |

ELECTRICAL DATA (NOCT)

| | |
|-------------------------------------|---------|
| Max. power (P_{mpp}): | 208,5 W |
| Max. voltage (U_{mpp}): | 31,9 V |
| Max. current (I_{mpp}): | 6,52 A |
| Open circuit voltage (U_{oc}): | 40,8 V |
| Short circuit current (I_{sc}): | 6,89 A |

ELECTRICAL DATA (general)

| | |
|----------------------------------|---------------|
| Cell temperature (T_{NOCT}): | 46 °C |
| Module efficiency: | 14,7% |
| Tolerance of performance: | -0W up to +5W |

- STC-Irradiation: 1000 W/m²; AM: 1,5; T_c : 25 °C
- NOCT-Irradiation: 800 W/m²; T_a : 20 °C; wind speed: 1 m/s
- Reduction of the module efficiency at decreasing irradiation from 1000 W/m² to 200 W/m²; (at AM: 1,5 & T_c : 25 °C) ≤ 4,5% - according EN 60904-1

GENERAL CHARACTERISTICS

| | |
|---------------|--------------------------------------------------------------------------------------------------------------------|
| Composition: | 72 (156 x 156 mm) polycrystalline silicon solar cells per module; 3 bypass-diodes; encapsulant EVA; rear cover TPT |
| Glass: | highly transparent, anti-reflective solar safety glass; 3,2 mm |
| Frame: | anodized aluminum |
| Junction box: | plastic; IP65; |
| Cable: | 4 mm ² ; 1200 mm |
| Connectors: | MC-T4-compatible |

TEMPERATURE COEFFICIENTS

| | |
|------------------------|-------------|
| Power: | - 0,45 %/°C |
| Open circuit voltage: | - 0,35 %/°C |
| Short circuit current: | 0,05 %/°C |

MECHANICAL DATA

| | |
|------------|---------|
| Height: | 1958 mm |
| Width: | 992 mm |
| Thickness: | 46 mm |
| Weight: | 23,5 kg |

CERTIFICATES/STANDARDS

Standards: IEC 61215; IEC 61730; ISO 9001; ISO 14001
Conformity: Datasheet according to DIN EN 50380