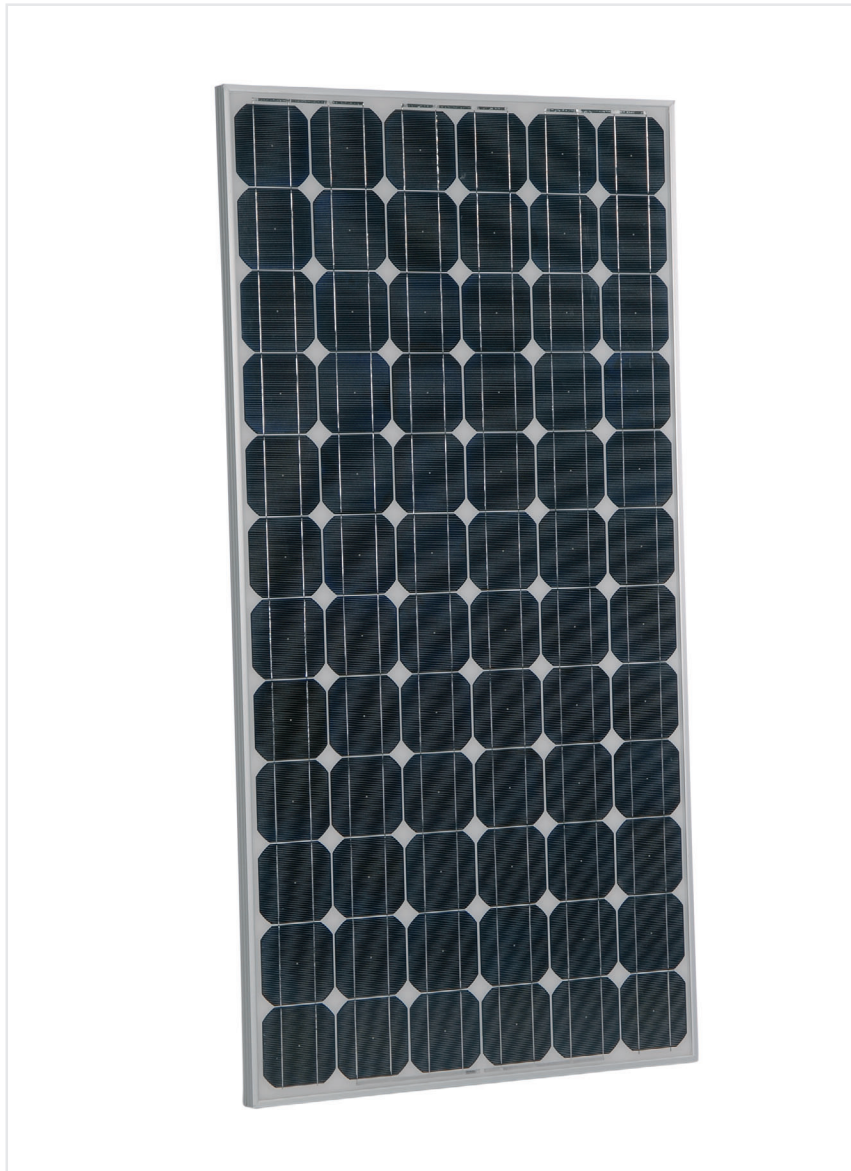


SOLAR MODULES

Monocrystalline

Sunflower

SF 160 M, SF 165 M, SF 170 M,
SF 175 M, SF 180 M



applicable for grid connected and
24V stand-alone systems

power warranties*

=> 25 years (80%)

=> 12 years (90%)

5 years product guarantee*

power tolerance $\pm 3\%$

IEC 61215 (projected)

safety class II up to 1000 V system voltage
(projected)

fast and inexpensive mounting:

=> delivered ready for connection

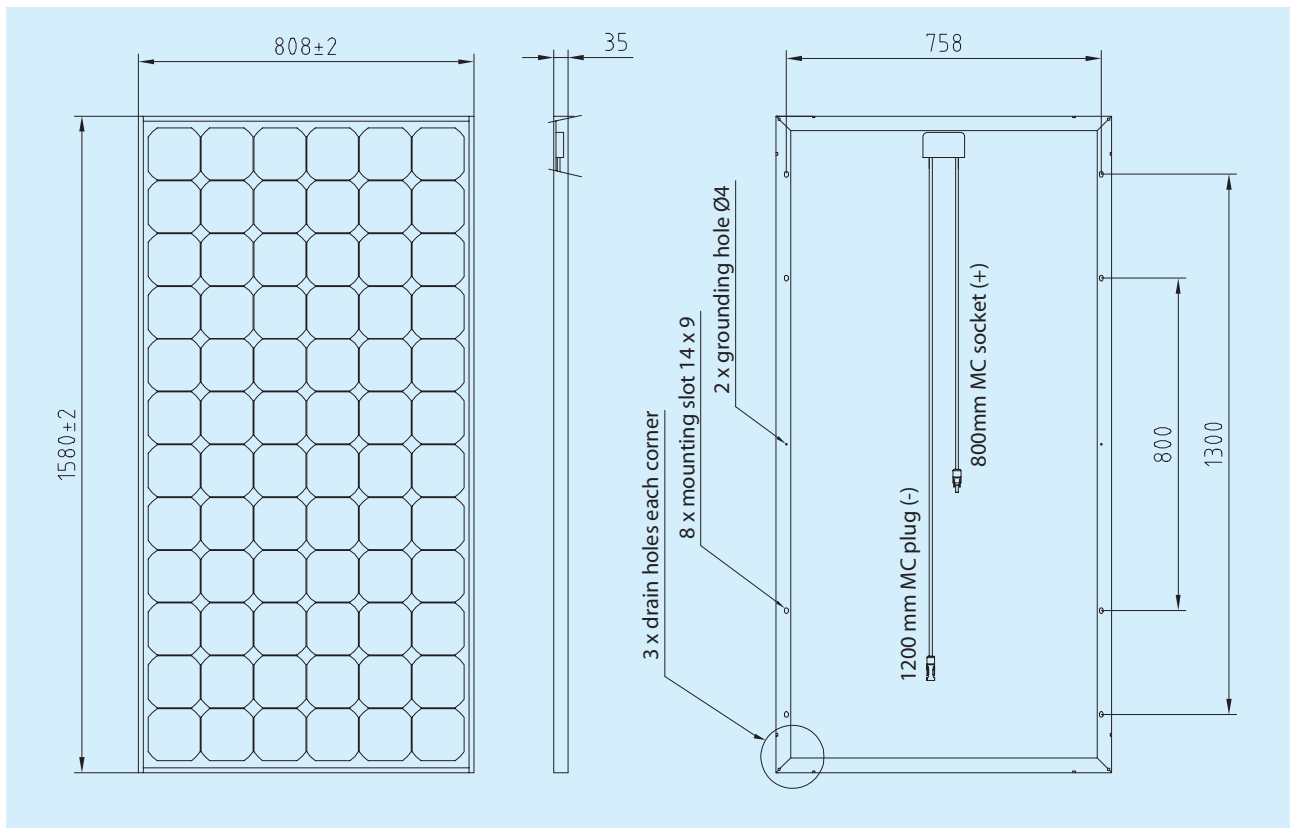
=> pre-confectioned cables

=> Multi-Contact plug-in connectors

=> integrated bypass diodes

72 monocrystalline cells (125mm x 125mm)
configured geometrically for a 6x12 matrix
connected series

100% end control with individual
registration of the electrical characteristics



dimensioned drawing SF 160 M, SF 165 M, SF 165 M, SF 170 M, SF 175 M, SF 180 M

Technical data

| | | SF 160 M | SF 165 M | SF 170 M | SF 175 M | SF 180 M |
|-----------------------------------|--------|------------|------------|------------|------------|------------|
| nominal peak power | Wp | 160 | 165 | 170 | 175 | 180 |
| guaranteed minimum power | Wp | 155,2 | 160,1 | 164,9 | 169,8 | 174,6 |
| nominal voltage | V | 34,5 | 34,8 | 35,0 | 35,2 | 36,0 |
| nominal current | A | 4,65 | 4,75 | 4,86 | 4,98 | 5,0 |
| open circuit voltage | V | 43,5 | 43,8 | 44,0 | 44,2 | 44,6 |
| short-circuit current | A | 5,10 | 5,20 | 5,40 | 5,50 | 5,30 |
| temperature coefficient I_{sc} | %/K | 0,06 | 0,06 | 0,06 | 0,06 | 0,06 |
| temperature coefficient U_{oc} | mV/K | -150 | -150 | -150 | -150 | -150 |
| temperature coefficient P_{max} | %/K | -0,4 | -0,4 | -0,4 | -0,4 | -0,4 |
| length | mm | 1580 | 1580 | 1580 | 1580 | 1580 |
| width | mm | 808 | 808 | 808 | 808 | 808 |
| height | mm | 35 | 35 | 35 | 35 | 35 |
| weight | kg | 16 | 16 | 16 | 16 | 16 |
| assembly holes (14 mm x 9 mm) | pieces | 8 | 8 | 8 | 8 | 8 |
| article numbers | | 200140160M | 200140165M | 200140170M | 200140175M | 200140180M |

Electrical values under standard test conditions:
1,000W/m²; 25°C; AM 1.5.

Subject to modifications that represent progress.

* The complete and individual valid guarantee conditions are relevant, which will be handed out by your IBC-representative on request.