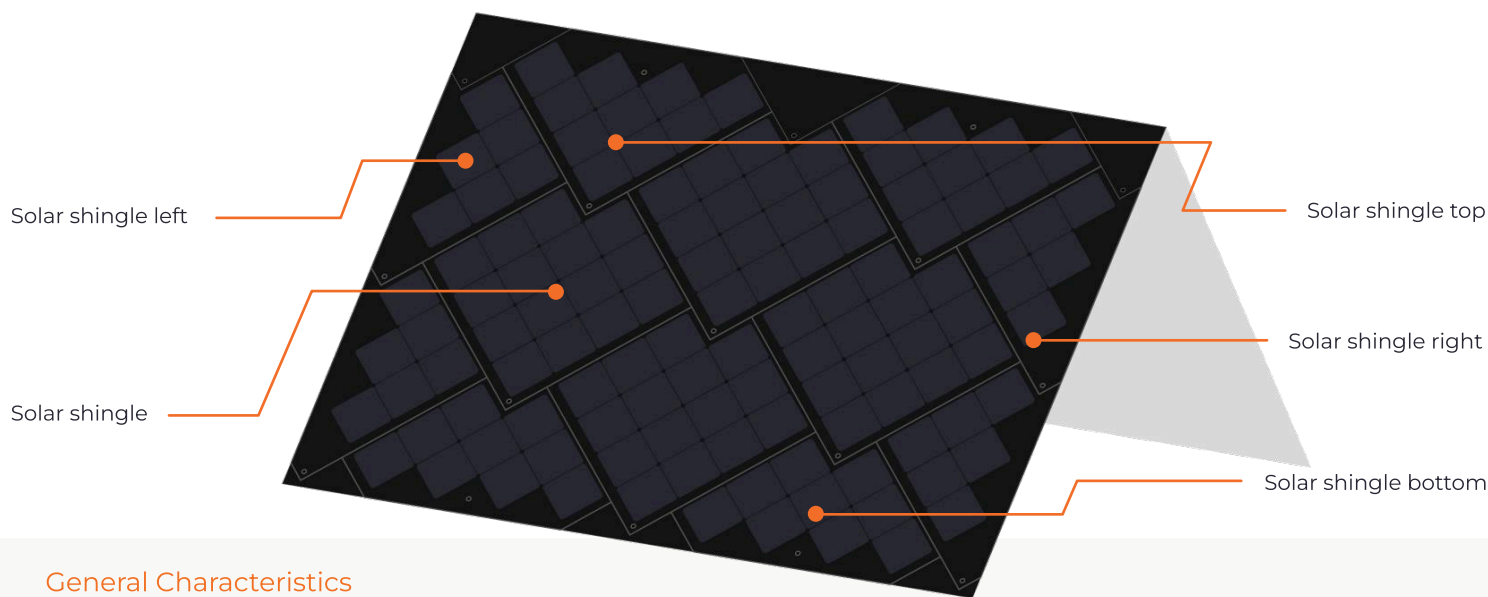


SunStyle 745 Black



General Characteristics

| | |
|--------------------------|---|
| | 745 x 745 x 7.5 mm |
| Laminate structure | Glass EVA Cells EVA Glass |
| Front Glass | Transmission optimized solar glass with structured, matt surface 3.2mm, thermally toughened |
| Back Glass | 3.2mm with screen printing black, thermally toughened |
| Solar cell type | Monocrystalline silicon PERC cells |
| Junction box | According to IEC 62790 |
| Bypass diodes | 2 Diodes per shingle |
| Connection cable | Solar cable 4 mm ² , 800 mm length |
| Connector | Original Stäubli Multi-Contact (MC4) |
| System weight | 20.5 kg / m ² |
| Substructure | Wooden slats with M6 inlets |
| Tested temperature range | -40°C bis +85°C |
| System power | Up to 172 W _p / m ² |

Quality and Warranty

| | |
|--|--|
| Product guarantee | 12 years |
| Performance guarantee | 10 years at 90 % of the nominal output 30 years at 80 % of the nominal output |
| Performance certificate | IEC 61215 |
| Safety certificate | IEC 61730 (protection class II) |
| Fire safety | DIN-EN 13501-5: B _{ROOF} (t1)/(t2)/(t3) DIN 4102-7: class B1 |
| Hail resistance class | HW 4 (withstands 40 mm Ø hailstones) |
| Tested Pressure load w/o support battens | 12'750 Pa |
| Permitted snow load with support battens | 8'500 Pa higher pressure on request |
| Accessibility | Dry roof can be accessed without any warranty restrictions |
| Water tightness | Min. slope 4° (cf. notice sheet: requirement roof-buildup) |

Electrical Properties at Standard Test Conditions (1000 W/m², 25°C and AM 1.5)

| Type of solar shingle | 745BL-S-F84 | Solar shingle bottom | Solar shingle top | Solar shingle left | Solar shingle right |
|---------------------------------------|-------------------|----------------------|-------------------|--------------------|---------------------|
| Nominal output | 84 W _p | 50 W _p | 55 W _p | 33 W _p | 33 W _p |
| Voltage V _{MPP} | 8.1 V | 4.8 V | 5.3 V | 3.2 V | 3.2 V |
| Current I _{MPP} | 10.4 A | 10.4 A | 10.4 A | 10.4 A | 10.4 A |
| Open circuit voltage V _{OC} | 10.2 V | 6.1 V | 6.8 V | 4.1 V | 4.1 V |
| Short circuit current I _{SC} | 10.5 A | 10.5 A | 10.5 A | 10.5 A | 10.5 A |
| Maximum system voltage | 1000 V DC | 1000 V DC | 1000 V DC | 1000 V DC | 1000 V DC |
| Reverse current overload | 18 A | 18 A | 18 A | 18 A | 18 A |
| Tolerance nominal output | +/- 3% | +/- 3% | +/- 3% | +/- 3% | +/- 3% |

System Enhancements

| | | | | |
|---------------------------|--|-----------|--|--|
| Temperature coefficient α | for short circuit current (I _{SC}) | +0,07 %/K | Complementary shingle fixed size Customizable shingle | Laminated safety glass, black SunStyle®-compound material black |
| Temperature coefficient β | for open circuit voltage (V _{OC}) | -0,36 %/K | Snow hook | Stainless steel, black |
| Temperature coefficient γ | for nominal output (P _{MPP}) | -0,38 %/K | Alpine support laths from 3600 Pa | Wood |