

Smartflower

The smart, simple
& stunning solar system

Smartflower is a revolutionary solar energy system that follows the sun from sunrise to sunset. Beneath its elegant design is a remarkably intelligent system; fully integrated with smart features that produce up to 40% more power. There's no better way to showcase your commitment to sustainability than with a **Smartflower**.



SMARTFLOWER TECHNICAL DATA - 50Hz



SYSTEM POWER OUTPUT

| | |
|------------------------------------|-------------------|
| Nominal power output | 2,5 kWp |
| Annual output with 2-axis tracking | 4,000–6,500 kWh * |

SOLAR MODULE

| | |
|-----------------------------------|-------------------------------------|
| Panel type | Glass / Backsheet |
| Panel power output warranty (80%) | 25 years |
| Panel product warranty | 10 years |
| Cell type | 166mm Half Cut Monocrystalline PERC |

SOLAR ARRAY DATA

| | |
|-----------------------------------|--------------------------|
| Array configuration | 12 module, single string |
| Array maximum power (Pmax) | 2677 W |
| MPP voltage (Vmpp) | 528 V |
| MPP current (Impp) | 5,0 A |
| Open circuit voltage (Voc, ± 5%) | 618 V |
| Short circuit current (Isc, ± 5%) | 5,2 A |

SYSTEM GENERAL DATA

| | |
|--------------------------------------|-------------------------|
| Inverter | Integrated with unit |
| System weight | 703 kg |
| System self-consumption per year | Approx. 400 kWh |
| Shipping dimensions (mm): | |
| Vertical packaging | 1651 x 1194 x 2692 |
| Horizontal packaging (special order) | 2819 x 1168 x 1854 |
| Total shipping weight | 885 kg |
| System warranty | 2 years parts and labor |

NORMATIVE REFERENCES

| | |
|---|----|
| Certificate and compliance with standards | CE |
|---|----|

OPERATIONAL CONDITIONS

| | |
|--|------------------------|
| Operational temperature range | -20°C to 55°C |
| Humidity | 0–95% (non condensing) |
| Maximum altitude (inverter restricted) | 2000 m |

ELECTRICAL CONNECTIONS

| | |
|-----------------------------------|--|
| Up to 30m (single phase) | 3 x 2,5–16 mm ² (L1, N, PE) |
| Up to 30m (three phase) | 5 x 2,5–16 mm ² (L1, L2, L3, N, PE) |
| From 30m onwards | Accommodate for voltage drop |
| Grid connection (circuit breaker) | |
| Single Phase | 16 A ** |
| Three Phase | 10 A ** |
| Wind guard | 9,75 m cable included |

REMOTE MONITORING

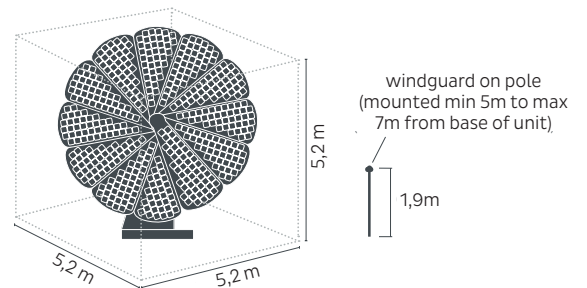
| | |
|----------------------------|-------------------------------------|
| Network / LAN cable | CAT 6e or CAT7 with RJ45 connector |
| Wireless | Wi-Fi enabled kit (optional) |
| Off-grid / remote location | Cell network enabled kit (optional) |

INSTALLATION

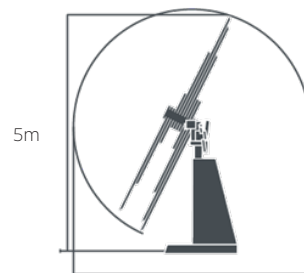
| | |
|----------|---|
| Mounting | 4 fastening points to foundation |
| Assembly | Earth screws, concrete foundation, or a pre-cast concrete pad *** |

DIMENSIONS

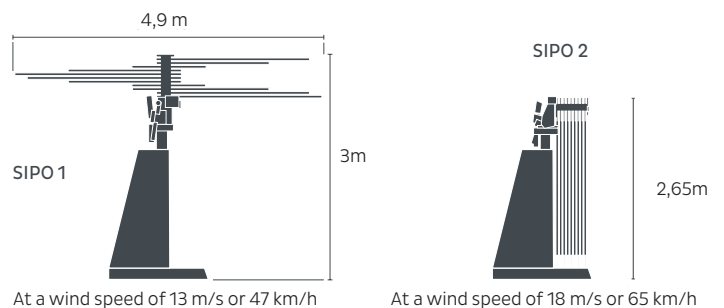
ACTIVE AREA



TRACKING, MAX. HEIGHT



SAFETY POSITIONS



* Dependent on geographical location and weather

** Local standards must be followed

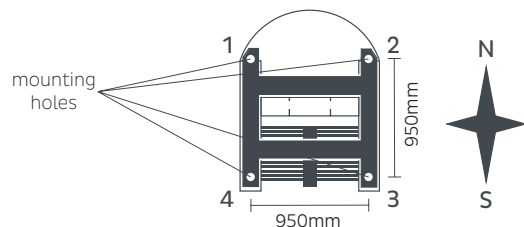
*** Recommendations may vary based on local jurisdiction and soil conditions

For more information, contact info@smartflowersolar.com

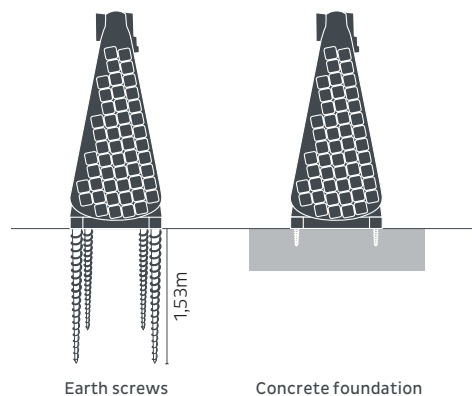
The product images shown are for illustration purposes only and may not be an exact representation of the product.

INSTALLATION DRAWINGS

BOTTOM VIEW



FOUNDATION



INVERTER DATA

| | | |
|-------------------|------------------------------------|---|
| Inverter | Steca Coolcept Flex StecaGrid 3011 | Steca Coolcept ³ Flex StecaGrid 3213 |
| Nominal frequency | 50 Hz / 60 Hz | 50 Hz / 60 Hz |

DC INPUT DATA

| | | |
|---------------------------------|-----------|-----------|
| Max. DC voltage | 750 V | 1000 V |
| MPPT voltage range | 125–600 V | 250–800 V |
| Max. input current | 13,0 A | 11,0 A |
| Number of inputs / MPP trackers | 1 | 1 |

AC OUTPUT DATA

| | | |
|----------------------|--|--|
| Rated AC power | 3000 W | 3200 W |
| Nominal AC current | 14 A | 7,0 A |
| Power factor | 0,8 – 0,8 ind. / cap. | 0,8 – 0,8 ind. / cap. |
| AC connection | On-grid (230 V L, N, PE), Single Phase | On-grid (230 V L1, L2, L3, N, PE), 3 Phase |
| Grid frequency range | 45–65 Hz | 45–65 Hz |

INVERTER EFFICIENCIES

| | | |
|-----------------|-------------|-------------|
| Max. efficiency | 97,0% | 98,0% |
| CEC efficiency | 96,3% (nEU) | 97,0% (nEU) |

SAFETY

| | | |
|-----------------------------|--|------------|
| Grid Monitoring | Yes | Yes |
| Residual Current Monitoring | Integrated | Integrated |
| Protection Class | Protection class 2 (RCD type A sufficient) | N/A |
| DC disconnect | Yes | Yes |

NORMATIVE REFERENCES

| | | |
|---|--|--|
| Certificate and compliance with standards | DIN VDE V 0126-1-1/A1, IEC 62109-1/-2, IEC 61727, IEC 62116, G83/2, G59/3, CEI 0-21, VDE-AR-N 4105 | EN 50549-1, DIN VDE-AR-N 4105, IEC 61727, IEC 62116, IEC62109-1/-2, EN 61000-6, EN IEC 63000 |
|---|--|--|

GENERAL DATA

| | | |
|----------------------|--|--|
| Degree of protection | IP 65 | IP 65 |
| Topology | Transformerless | Transformerless |
| Inverter warranty | 2 years (5 years with user registration) | 2 years (5 years with user registration) |

NOTE: For additional inverter details, see manufacturer's literature.



The world's most intelligent solar system



Catch every last ray of sunlight.

The smart tracking system is the core of **Smartflower's** brilliance. Every morning at sunrise, **Smartflower** automatically unfolds. The dual-axis system allows **Smartflower's** solar panels to follow the sun across the sky throughout the day, always maintaining the optimal 90° angle. This makes **Smartflower** produce up to 40% more power than a conventional solar system and capable of producing up to 6,500 kWh/year, depending on your location.



Simple.

Control your Smartflower and monitor your energy production from the comfort of your phone with our remote monitoring app.



Efficient.

Our certified Smartflower technicians can set it up in just a few hours, providing you with immediate energy independence.



Independent.

Self-cleaning and convection cooling keep **Smartflower** running at maximum efficiency.



Elegant.

Unique and powerful features packaged in an award-winning design.



EV Compatible.

Smartflower can be used to charge electric vehicles thanks to easy integration with an external EV charging station. For organizations and companies, EV charging capacity is your “green business card” and is perfect for public spaces, shopping centers, hotels, restaurants, small businesses, and more.



Smartflower +Plus.

With an integrated battery storage system, **Smartflower +Plus** lets you store clean solar energy for when you need it most. That means that even during peak demand times, or when the power is out, your **Smartflower +Plus** will continue to provide you with clean and reliable energy whether you're on or off the grid.

Recipient of the Red Dot Design Award, the SEA Sustainable Entrepreneurship Award, the Green Good Design Award, the Verbund-E-Novations Award, and the Austria Born Global Champions Award