

# Smartflower

The smart, simple  
& stunning solar system

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**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
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### NORMATIVE REFERENCES

Certificate and compliance with standards	CE
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### OPERATIONAL CONDITIONS

Operational temperature range	-20°C to 55°C
Humidity	0–95% (non condensing)
Maximum altitude (inverter restricted)	4000 m

### ELECTRICAL CONNECTIONS

Up to 30m (single phase)	3 x 2,5–16.mm <sup>2</sup> (L1, N, PE)
Up to 30m (three phase)	5 x 2,5–16mm <sup>2</sup> (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
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### REMOTE MONITORING

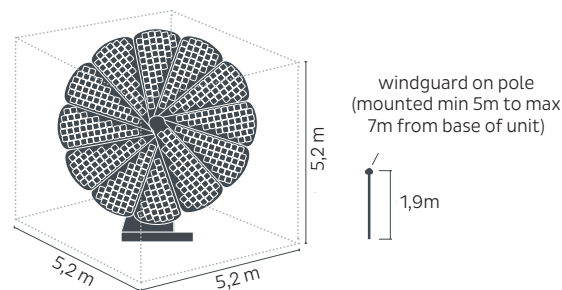
Network / LAN cable	CAT 6e or CAT7 with RJ45 connector
Wireless	Wi-Fi enabled kit (optional)
Off-grid / remote location	Cell network enabled kit (optional)

### INSTALLATION

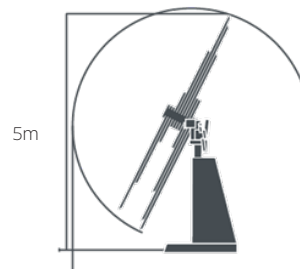
Mounting	4 fastening points to foundation
Assembly	Earth screws, concrete foundation, or a pre-cast concrete pad ***

### DIMENSIONS

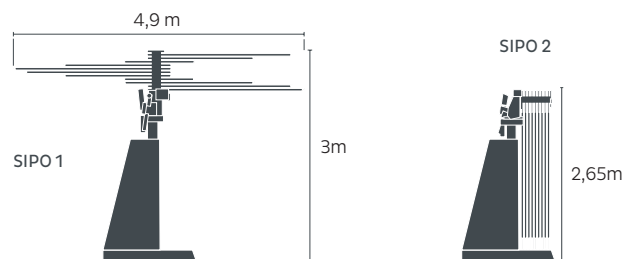
#### ACTIVE AREA



#### TRACKING, MAX. HEIGHT



#### SAFETY POSITIONS



At a wind speed of 13 m/s or 47 km/h

At a wind speed of 18 m/s or 65 km/h

\* Dependent on geographical location and weather

\*\* Local standards must be followed

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

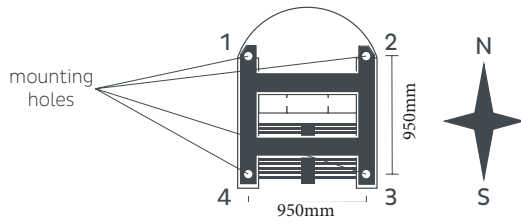
For more information, contact [info@smartflowersolar.com](mailto:info@smartflowersolar.com)

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

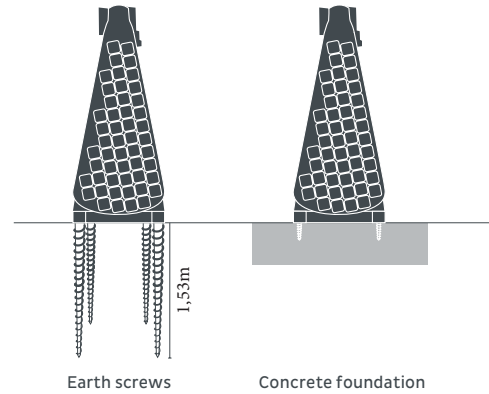


## INSTALLATION DRAWINGS

BOTTOM VIEW



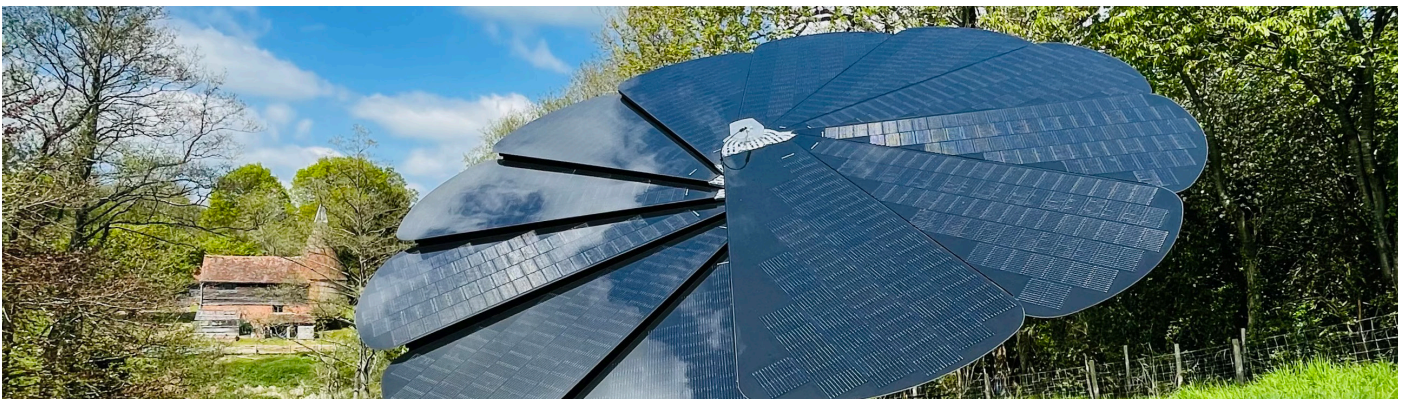
FOUNDATION



## INVERTER DATA

Inverter	Solis S6-GR1P3K	Solis S5-GR3P3K
Nominal frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
<b>DC Input data</b>		
Max. DC voltage	600 V	1100 V
MPPT voltage range	90–520 V	160–1000 V
Max. input current	14,0 A	16,0 A
Number of inputs / MPP trackers	2/2	2/2
<b>AC OUTPUT DATA</b>		
Rated AC power	3000 W	3000 W
Max. AC current	15,7 A	4,7 A
Power factor	>0,99 (0,8 leading - 0,8 lagging)	>0,99 (0,8 leading - 0,8 lagging)
AC connection	Single Phase (L, N, PE) 220V/230V	Three Phase (L1, L2, L3, N, PE), 3 Phase
Grid frequency range	45–65 Hz	45–65 Hz
<b>INVERTER EFFICIENCIES</b>		
Max. efficiency	97,3%	98,3%
CEC efficiency	96,6% (nEU)	97,7% (nEU)
<b>SAFETY</b>		
DC reverse-polarity protection	Yes	Yes
Short circuit protection	Yes	Yes
Output over current protection	Yes	Yes
Surge protection	Yes	Yes
Grid Monitoring	Yes	Yes
Anti-islanding protection	Yes	Yes
Temperature protection	Yes	Yes
Integrated AFCI	Yes (activation required)	Yes (activation required)
<b>NORMATIVE REFERENCES</b>		
Grid connection standards	G98, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA	G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530
Safety/EMC standards	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-3	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4
<b>GENERAL DATA</b>		
Degree of protection	IP 66	IP 66
Topology	Transformerless	Transformerless
Inverter warranty	5 years	5 years

**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.

\*Smartflower +Plus is currently only available within the USA and Canada.

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