

# 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 produces up to 40% more power. There's no better way to showcase your commitment to sustainability than with a **Smartflower**.



<b>INVERTER DATA</b>	
Inverter	Fronius Primo 3.8-1 (UL)
Nominal frequency	60 Hz
<b>DC INPUT DATA</b>	
Max. DC voltage	600 V
MPPT voltage range	200–480 V
Max. DC work current (MPPT1)	18 A
Number of inputs / MPP trackers	2
<b>AC OUTPUT DATA</b>	
Rated AC power	3800 VA
Max. AC current	15.8 A (240 V) 18.3 A (208 V)
Power factor (cos $\phi$ )	0.85–1 ind. / cap.
AC connection	On-grid (240 V split-phase, L1, L2, N, PE), Single Phase
Grid frequency range	45–66 Hz (240 V)
<b>FEED-IN PHASES</b>	
Max. efficiency	96.7%
CEC efficiency	95.0%
<b>PROTECTIVE DEVICES</b>	
DC reverse polarity protection	Yes
DC insulation measurement	N/A
Anti-islanding	Internal, in accordance with UL 1741-2016-09, IEEE 1547 2003 and NEC 2017
Over temperature protection	Output power derating / Active cooling
Overload behavior	
AFCI	Yes
Rapid shutdown compliant	Yes (according to NEC 2014)
Ground fault protection with isolation monitor interrupter	Yes
DC disconnect	Yes
<b>NORMATIVE REFERENCES</b>	
Certificate and compliance with standards	UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2-2013, CSA TIL M-07 Issue 1 – 2013
<b>GENERAL DATA</b>	
Relative humidity	0–100%
Degree of protection	NEMA 4X
Topology	Transformerless
Inverter warranty	10 years

For more information: [www.fronius.com](http://www.fronius.com)

### SMARTFLOWER TECHNICAL DATA

Nominal output	2.5 kWp
Yearly output with 2-axis tracking	4,000–6,500 kWh / a *

### SYSTEM

Panel type	Glass / Backsheet
Panel power output warranty (80% power)	25 years
Panel product warranty	10 years
Cell type	Monocrystalline PERC
Inverter	Integrated with unit
System weight	1,550 lb   703 kg
System warranty (parts / labor)	2 years
System self-consumption per year	Approx. 400 kWh
Agency approval	UL 3703, UL 1703, UL 1004, CEC, CSA, CE, FCC Class B

### Shipping dimensions (in | mm):

Vertical packaging	65 x 47 x 106   1651 x 1194 x 2692
Horizontal packaging (special order)	111 x 46 x 73   2819 x 1168 x 1854
Total shipping weight	1,950 lbs   885 kg

### APPLICATION AREA

Temperature range	-4°F to 131°F   -20°C to 55°C
Humidity	0–95% (non condensing)
Maximum altitude (Primo)	13,123 ft   4000 m
Maximum altitude (Symo)	7,874 ft   2400 m

### ELECTRICAL CONNECTIONS

Up to 100 ft (Primo 3.8)	4 x 12 AWG (L1, L2, N, PE) **
Up to 100 ft (Primo 3.0)	3 x 2.5–16mm (L1, N, PE)
Up to 100 ft (Symo 3.0)	5 x 2.5–16mm (L1, L2, L3, N, PE)
From 100 ft onwards	Accommodate for voltage drop
Grid connection (circuit breaker)	***
Primo 3.8	20 A
Primo 3.0	16 A
Symo 3.0	10 A

Wind guard 32 ft | 9.75 m cable included

### REMOTE MONITORING

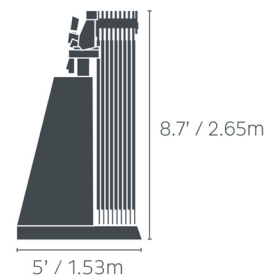
Network / LAN cable	CAT 5 or better
Connector	RJ45
Off-grid / remote location	Cell network enabled kit (optional)

### INSTALLATION

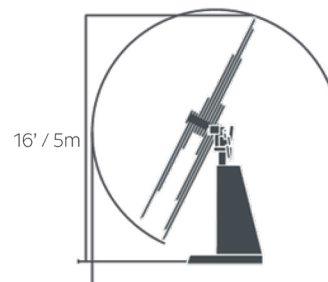
Mounting	4 fastening points to foundation
Assembly	Earth screws, concrete foundation, or a pre-cast concrete pad ****

### DIMENSIONS

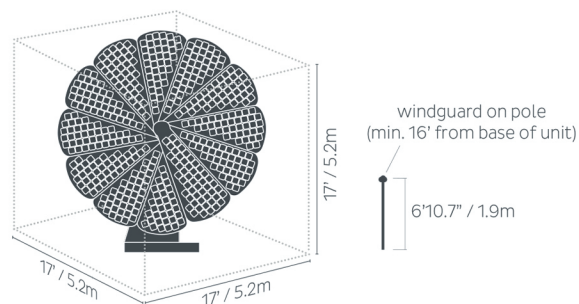
#### TRANSPORT POSITION



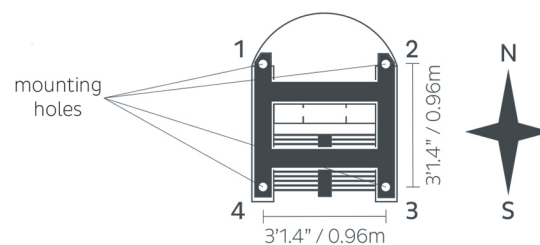
#### TRACKING, MAX. HEIGHT



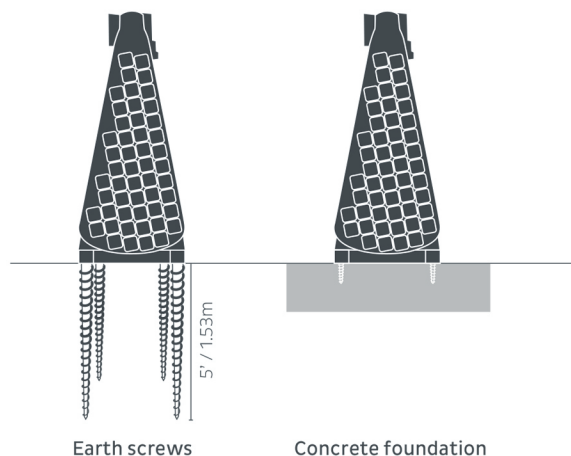
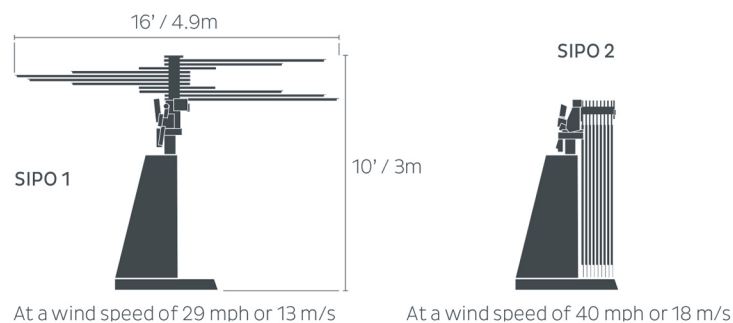
#### ACTIVE AREA



#### BOTTOM VIEW



#### SAFETY POSITIONS



- \* Dependent on geographical location and weather
- \*\* If using a 208 VAC connection, please contact Smartflower before installation
- \*\*\* Local standards must be followed
- \*\*\*\* Recommendations may vary based on local jurisdiction and soil conditions

# 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 6,400 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 Verbund-E-Novations Award, the Green Good Design Award, and the Austria Born Global Champions Award

Revision	Date	Author	Comments
N	8/25/2021	SH	