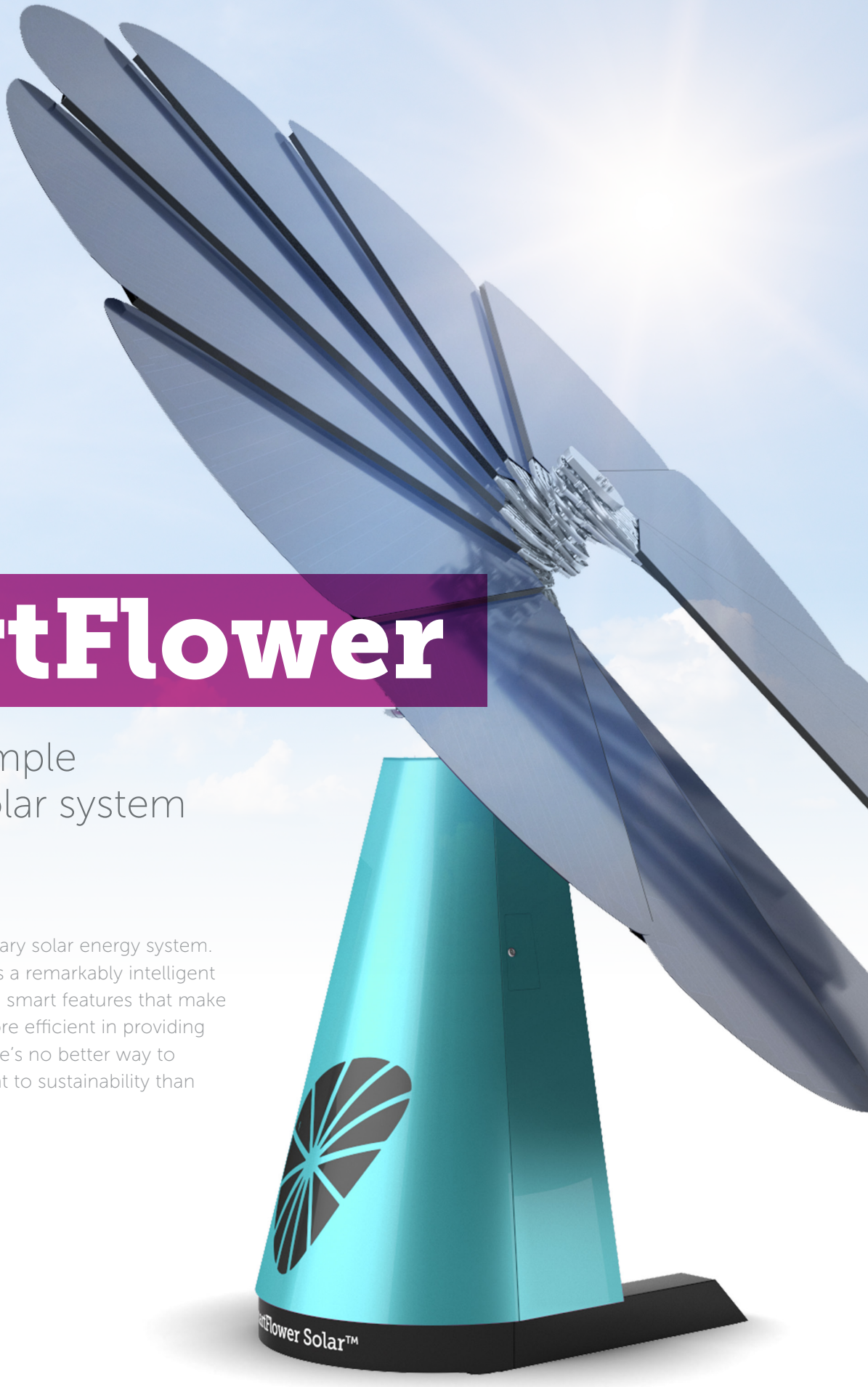
SmartFlower

The smart, simple & stunning solar system

SmartFlower is a revolutionary solar energy system. Beneath its elegant design is a remarkably intelligent system; fully integrated with smart features that make **SmartFlower** up to 40% more efficient in providing you with clean energy. There's no better way to showcase your commitment to sustainability than with a **SmartFlower**.



SmartFlower™ Solar | smartflowersolar.com www.faboro.de|

ollow the sun
www.faboro.de

SmartFlower Solar™

INVERTER DATA

Inverter	Fronius Primo 3.8 (UL)	Fronius Primo 3.0 (CE)
Nominal Frequency	60 Hz	50 Hz
DC Input Data		
Max. PV-generator power	6 kWp	4.5 kWp
Max. DC voltage	600 V	1000 V
MPPT voltage range	200-480 V	80-800 V
Max. DC work current	18 A	12 A
Number of inputs/Mpp trackers	2	2
AC Output Data		
Rated AC power	3800 VA	3000 VA
Max. AC current	15.8 A (240V)	13.0 A
Power factor (cos g)	0.85-1 ind. / cap.	0.85-1 ind. / cap.
AC connection	On-grid (240 V split-phase, L1, L2, N, PE)	On-grid (230V L, N, PE)
Grid Frequency Range	50 – 66 Hz (240V)	45 – 65 Hz
Feed-in phases		
Max. efficiency	96.7%	98.0%
CEC efficiency	95.0%	96.1% (ηEU)
Protective Devices		
DC reverse polarity protection	Yes	Yes
DC Insulation measurement	NA	Yes
Anti Islanding	Internal, in accordance with UL 1741 2016 09, IEEE 1547 2003 and NEC 2017	NA
Over Temperature Protection	Output power derating/Active Cooling	NA
Overload behavior		Operating point shift. Power Limitation
AFCI	Yes	NA
Rapid shutdown compliant	Per Sect. 690.12 of 2014 (of NEC 2017 prior to Jan 2019)	
Ground Fault Protection with Isolation Monitor Interrupter	Yes	
DC Disconnect	Yes	Yes
Normative references		
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	DIN V VDE 0126-1-1/A1, IEC 62109-1/-2, IEC 62116, IEC 61727, AS 4777-2, AS 4777-3, G83/2, G59/3, CEI 0-21, VDE AR N 4105 2)
General Data		
Operative temperature range	-40° F to 131° F | -40° C to 55° C	-40° F to 131° F | -40° C to 55° C
Relative humidity	0 – 100%	0 – 100%
Degree of protection	NEMA 4X	IP 65
Topology	Transformerless	Transformerless

For more information: www.fronius.com

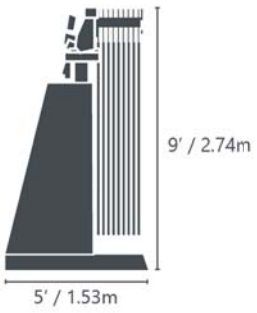
SmartFlower Solar™

SMARTFLOWER TECHNICAL DATA		INSTALLATION
Nominal output	2.5 kWp *	4 fastening points to foundation
Output with 2-axis tracking	4,500-6,500 kWh / a**	Assembly with earth screws, concrete foundation or a pre-cast concrete pad

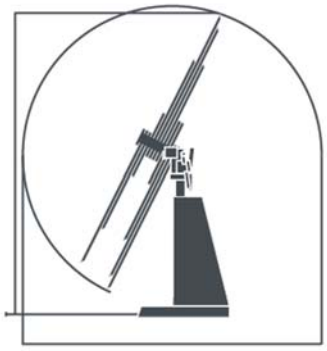
SYSTEM		APPLICATION AREA	
Panel Type	Glass / Backsheet	Temperature Range	-4° F to 122° F | -20° C to 50° C
Panel Power Output Warranty	25 years at ≥ 80%	Humidity	0 – 95% (non condensing)
Panel Product Warranty	10 years	Maximum altitude	13,123 ft. | 4000 m
Cell type	Monocrystalline		
		ELECTRICAL CONNECTIONS	
Inverter Module	Integrated with unit	Up to 100 ft	4 x 12 AWG (L1, L2, N, PE)
Inverter Module Warranty	10 years	From 100 ft onwards	Accommodate for voltage drop
System Weight	1,550 lb | 703 kg	The grid connection must be secured with 20A (16A for Europe) circuit breaker.	Local standards must be followed
System Warranty	5 years	Wind guard incl. 32 ft / 9.75m cable length.	
System self-consumption per year	Approx. < 100 kWh	Network / LAN cable recommended (CAT 6e or CAT7), RJ45 connector.	
Agency Approval	UL 3703, UL 1703, UL 1004, CSA, CE, FCC Class B	*If using a 208 VAC connection, please contact SmartFlower Solar before installation	

DIMENSIONS

TRANSPORT POSITION

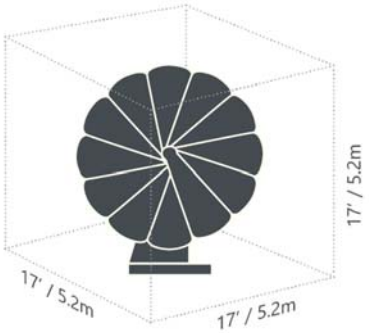


TRACKING, MAX. HEIGHT

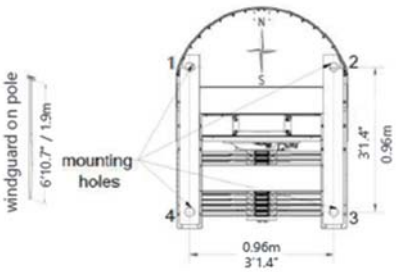


FIXING POINTS / ORIENTATION

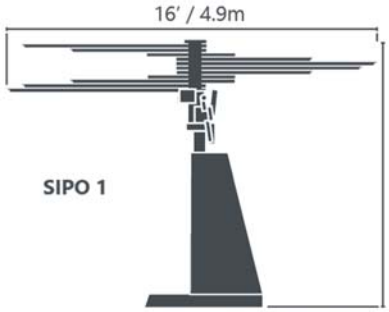
ACTIVE AREA



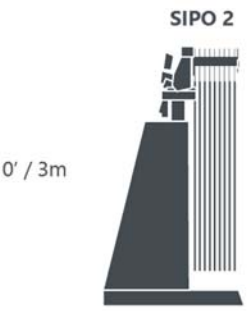
BOTTOM VIEW



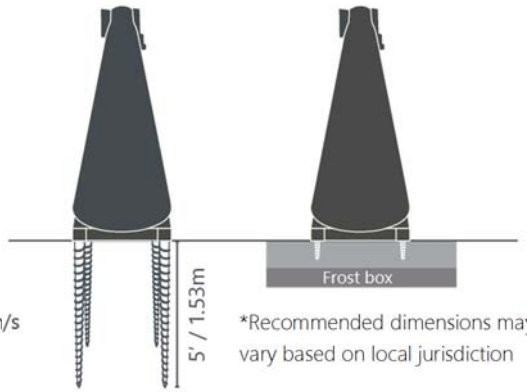
SAFETY POSITIONS



At a wind speed of 33 mph or 15 m/s



At a wind speed of 40 mph or 18m/s



*Recommended dimensions may vary based on local jurisdiction

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 itself. The dual-axis system allows **SmartFlower's** solar panels to follow the sun across the sky throughout the day, always maintaining the optimal angle to the sun. This makes **SmartFlower** 40% more efficient than a conventional solar system and capable of producing 4,000-6,400 kWh/year, depending on your location.

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

Efficient.
Smart tracking helps **SmartFlower** stay at the optimal angle to the sun throughout the day for 40% more power.

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 external EV charging stations. 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

faboro deutschland gmbh | +49 7459-7684164 | Nagold (Süd) - Hamburg (Nord) | info@faboro.de