

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
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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 2,5–16mm 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

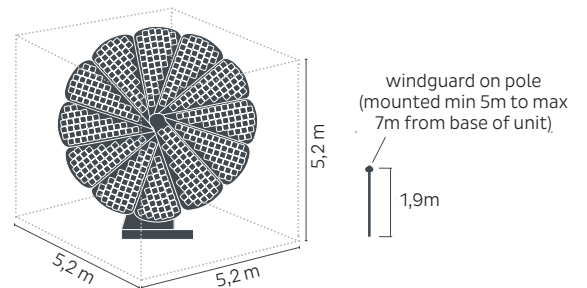
Network / LAN cable	CAT 6e or CAT7 with RJ45 connector
Wireless	Wi-Fi enabled kit (optional)
Off-grid / remote location	Cell network enabled kit (optional)

INSTALLATION

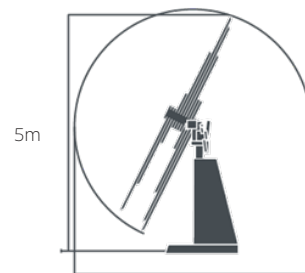
Mounting	4 fastening points to foundation
Assembly	Earth screws, concrete foundation, or a pre-cast concrete pad ***

DIMENSIONS

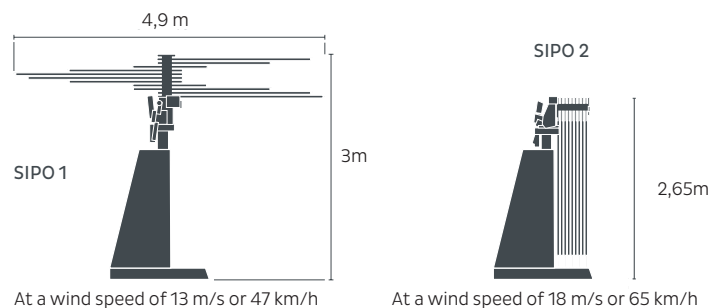
ACTIVE AREA



TRACKING, MAX. HEIGHT



SAFETY POSITIONS



* Dependent on geographical location and weather

** Local standards must be followed

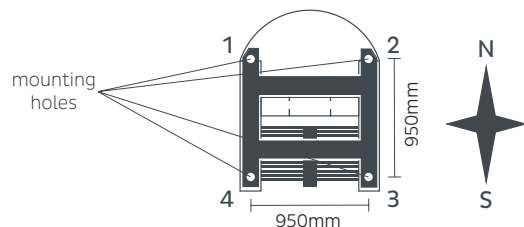
*** Recommendations may vary based on local jurisdiction and soil conditions

For more information, contact info@smartflowersolar.com

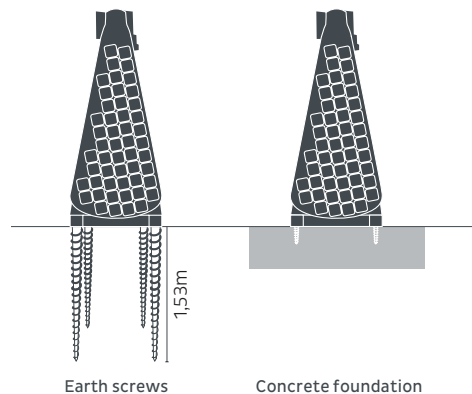
The product images shown are for illustration purposes only and may not be an exact representation of the product.

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
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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.

