

SP1400D

Optimizer



MORE PRODUCTION

- Up to 30% increased power generation
- Up to 0.5% increased system efficiency with smart Shade-Proof technology



FLEXIBLE DESIGN AND EASY TO INSTALL

- Patented structure to save installation time up to 45%
- High current design, long strings supported, effectively reducing BOS



SAFE AND RELIABLE

- Rapid shutdown to 30V within 20 seconds
- Patented FHC circuit design, lower failure rates, longer service life



EFFICIENT O&M

- Rapid data refresh in 10 seconds
- Module-level IV scanning and diagnosis *



Type designation	SP1400D
Input	
Max. input voltage	125 V
MPPT voltage range	12.5 V - 105 V
Max. DC short-circuit current (I _{sc})	30 A
Overvoltage category	II
Output	
Rated output power	1400 W
Max. output voltage	80 V
Max. output current	23 A
Bypass working mode	Yes
Safety output voltage	1 V **
Efficiency	
Max. efficiency	99.5 %
Weighted efficiency	99.0 %
General data	
Dimensions (W * H * D)	143 mm * 86 mm * 53 mm
Weight (including cables)	1.0 kg
Degree of protection	IP 68
Allowable relative humidity range (non-condensing)	0 % - 100 %
Operating ambient temperature range	-40 °C - 85 °C
Max. operating altitude	4000 m
Mounting method	Push-in or bolt installation
Communication	PLC (≤ 450 m)
PV input / output connector	Stäubli MC4 / MC4 compatible
PV input wire length	1.4 m (+ / -)
Out put wire length	0.15 m (+) / 2.95 m (-)
Standard compliance	IEC 61000-6-2, IEC 61000-6-3, IEC 62109-1 (class II safety)
Compatible products	SG25 / 30 / 33 / 36 / 40 / 50CX-P2 *** SG125CX-P2 ***

* Currently 4 kinds of typical diagnosis at module level are available.

** 1 V when input voltage is equal to or higher than 65 V and 0.5 V when input voltage is lower than 65 V.

*** Please consult Sungrow before placing an order on optimizers and compatible inverters.

