Power Optimiser

For Australia

S1000 / S1200

25 YEAR WARRANTY

SolarEdge's most advanced, cost-effective Power Optimiser for commercial and large field installations

▮ Greater Energy Yields

- ▮ High efficiency (99.5%) with panel-level MPPT, for maximized system energy production and revenue, and fast project ROI
- ▮ Supports high power and bifacial PV panels, and high string current for more power per string

▮ Maximum Protection with Built-In Safety

- ▮ Designed to automatically reduce high DC voltage to touch-safe levels upon grid/inverter shutdown, with SafeDC™
- ▮ Includes SolarEdge Sense Connect, allowing continuous monitoring to detect overheating due to installation issues or connector-level wear and tear

▮ Lower BoS Costs

- ▮ Flexible system design enables maximum space utilization and up to 2x longer string lengths, 50% less cables, fuses and combiner boxes
- ▮ Supports connection of two PV panels in series with easy cable management and fast installation times

▮ Simpler O&M

- ▮ Panel-level system monitoring enabling pinpointed fault detection and remote, time-saving troubleshooting

solaredge.com

solaredge

/ Power Optimiser
For Australia
S1000 / S1200

	S1000	S1200	Units
INPUT			
Rated Input DC Power(1)	1000	1200	W
Absolute Maximum Input Voltage (Voc)	125		Vdc
MPPT Operating Range	12.5 – 105		Vdc
Maximum Short Circuit Current (Isc) of Connected PV Panel	15		Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.8		%
Overvoltage Category	II		
Overcurrent Protection	15.75		Adc
OUTPUT DURING OPERATION			
Maximum Output Current	18	20	Adc
Maximum Output Voltage	80		Vdc
OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM INVERTER OR INVERTER OFF)			
Safety Output Voltage per Power Optimiser	1		Vdc
STANDARD COMPLIANCE			
EMC	FCC Part 15, IEC 61000-6-2, and IEC 61000-6-3 – Class B, EN 55011		
Safety	IEC62109-1 (class II safety)		
Material	UL94 V-0, UV Resistant		
RoHS	Yes		
Fire Safety	VDE-AR-E 2100-712:2013-05		
INSTALLATION SPECIFICATIONS			
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	129 x 165 x 52	129 x 165 x 59	mm
Weight (including cables)	1064	1106	gr
Input Connector	MC4(2)		
Input Wire Length	Short Input: 0.1 Long Input: 1.3(3)	Short Input: 0.1 Long Input: 1.6(3)	m
Output Connector	MC4		
Output Wire Length(4)	(+) 4.7 (-) 0.10	Option 1: (+) 5.3 (-) 0.10 Option 2: (+) 2.7 (-) 0.10	m
Operating Temperature Range(5)	-40 to +85		°C
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 – 100		%

(1) Rated power of the module at STC will not exceed the power optimiser Rated Input DC Power. Panels with up to +5% power tolerance are allowed.
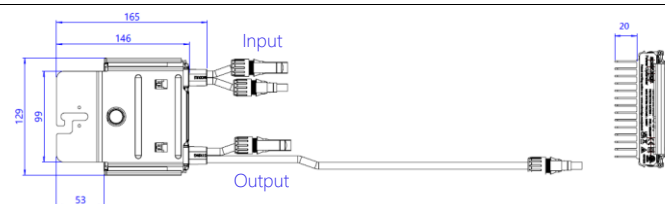(2) For other connector types please contact SolarEdge.
(3) For S-Series models with long input cables (1.3m or 1.6m), the Sense Connect feature is only enabled on the output cable connectors.
(4) Option 1 best fits when modules are placed in landscape orientation or in portrait orientation with power optimisers connected in leapfrog wiring method.
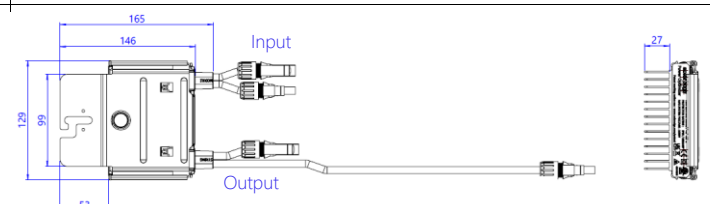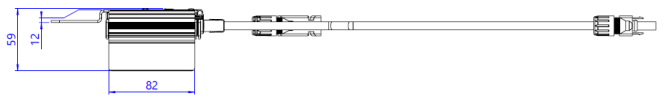   Option 2 best fits when modules are placed in portrait orientation.
(5) For ambient temperatures above +65°C power de-rating is applied.

S1000 Mechanical Drawing	S1200 Mechanical Drawing

* When installing SolarEdge power optimisers, maintaining clearance is required. Refer to the Power Optimiser Clearance Application Note for more details.

/ Power Optimiser

S1000

PV System Design Using a SolarEdge Inverter[1][2][3][4]		230/400V Grid SE16K, SE17K, SE25K*	230/400V Grid SE27.6K*	230/400V Grid SE30K*	230/400V Grid SE33.3K*	Units
Compatible Power Optimisers		S1000				
Minimum String Length	Power Optimisers	14	14	15	14	
	PV Panels	27	27	29	27	
Maximum String Length	Power Optimisers	30	30	30	30	
	PV Panels	60	60	60	60	
Maximum Continuous Power per String [W]		13,500	13,950	15,300	13,500	W
Maximum Allowed Connected Power per String[4]		1 string – 15,750	1 string – 16,200	1 string – 17,550	2 strings – 15,750	
		2 strings or more – 18,500	2 strings or more – 18,950	2 strings or more – 20,300	3 strings or more – 18,500	
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimisers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimisers				

*The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(1) S1000 cannot be mixed with S1200 in the same string. For P-series compatibility please refer to the SolarEdge Power Optimiser Inter-Compatibility Technical Note.
(2) For each string, a Power Optimiser may be connected to a single PV panel if:
  1) Each Power Optimiser is connected to a single PV panel (the entire string has a 1:1 configuration).
  2) It is the only Power Optimiser connected to a single PV panel.
(3) For SE16K and above, the minimum STC DC connected power should be 11KW.
(4) To connect more STC power per string, design your project using SolarEdge Designer.

S1200

PV System Design Using a SolarEdge Inverter[5][6][7][8]		230/400V Grid SE16K, SE17K, SE25K*	230/400V Grid SE27.6K*	230/400V Grid SE30K*	230/400V Grid SE33.3K*[9]	Units
Compatible Power Optimisers		S1200				
Minimum String Length	Power Optimisers	14	14	15	15	
	PV Panels	27	27	29	29	
Maximum String Length	Power Optimisers	30	30	30	30	
	PV Panels	60	60	60	60	
Maximum Continuous Power per String [W]		15,000	15,500	17,000	17,000	W
Maximum Allowed Connected Power per String[8]		1 string – 17,250	1 string – 17,750	1 string – 19,250	1 string – 19,250	
		2 strings or more – 20,000	2 strings or more – 20,500	2 strings or more – 23,000	2 strings or more – 23,000	
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimisers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimisers				

*The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(5) S1200 cannot be mixed with any other power optimiser in the same string.
(6) For each string, a Power Optimiser may be connected to a single PV panel if:
  1) Each Power Optimiser is connected to a single PV panel (the entire string has a 1:1 configuration).
  2) It is the only Power Optimiser connected to a single PV panel.
(7) For SE16K and above, the minimum STC DC connected power should be 11KW.
(8) To connect more STC power per string, design your project using SolarEdge Designer.
(9) To connect an S1200 power optimiser with an SE33K inverter, you must toggle the Fixed String Voltage from 750Vdc to 850Vdc via SolarEdge SetApp. For details, see this application note.

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

f SolarEdge

𝕏 @SolarEdgePV

⌾ @SolarEdgePV

▶ SolarEdgePV

in SolarEdge

✉ www.solaredge.com/corporate/contact

solaredge.com

Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.

CE RoHS

solar**edge**