## Power Optimiser For Australia

S440, S500



## POWER OPTIMISER

## PV power optimisation at the module-level

- Specifically designed to work with SolarEdge inverters
- Detects abnormal PV connector behavior, preventing potential safety issues\*
- Module-level voltage shutdown for installer and firefighter safety
- Superior efficiency (99.5%)
- Mitigates all types of modules mismatchloss, from manufacturing tolerance to partial shading

- Flexible system design and compatible with bifacial PV modulesfor maximum space utilization
- Faster installations with simplified cable management and easy assembly using a single bolt
- Next generation maintenance with module safety



<sup>\*</sup> Functionality subject to inverter model and firmware version

## / Power Optimiser For Australia

S440, S500

	S440	S500	Unit
INPUT			
Rated Input DC Power <sup>(1)</sup>	440	500	W
Absolute Maximum Input Voltage (Voc)	6	60	
MPPT Operating Range	8 - 60		Vdc
Maximum Short Circuit Current (Isc) of connected PV Module	14.5		Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98	98.8	
Overvoltage Category			
Input Overcurrent Protection	15		Adc
OUTPUT DURING OPERATION			
Maximum Output Current	15		Adc
Maximum Output Voltage	60		Vdc
OUTPUT DURING STANDBY (POWER OPTIMISER D	ISCONNECTED FROM INVERTER OR	INVERTER OFF)	
Safety Output Voltage per Power Optimiser	1		Vdc
STANDARD COMPLIANCE			1
EMC	FCC Part 15 Class B, IEC6	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3	
Safety	IEC62109-1 (class II safety), UL1741		
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 155 x 30		mm
Weight (including cables)	655 / 1.5		gr/lb
Input Connector	MC4(2)		
Input Wire Length	0.1		m
Output Connector	MC4		
Output Wire Length	(+) 2.3, (-) 0.10		m
Operating Temperature Range <sup>(3)</sup>	-40 to +85		°C
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 - 100		%

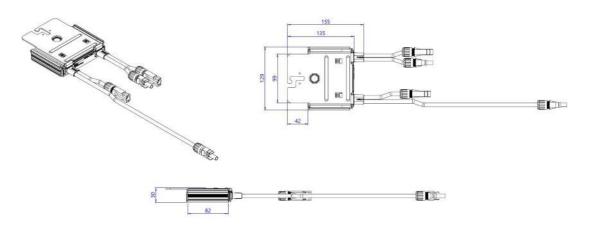
<sup>(1)</sup> Rated power of the module at STC will not exceed the Power Optimiser Rated Input DC Power. Modules with up to +5% power tolerance are allowed

<sup>(3)</sup> For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimisers Temperature <u>De-Rating Technical Note</u> for more details

PV System Design Using a SolarEdge Inverter	Genesis / Energy Hub	Three Phase Residential	Three Phase Commercial		
Minimum String Length	8	9	16		
Maximum String Length	25		50		
Maximum nominal power per string <sup>(4)</sup>	5700 (6000 with SE8250H / SE10000H)	5625	11250 <sup>(5)</sup>	W	

<sup>4)</sup> If the inverters rated AC power ≤ maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC power Refer to: https://www.solaredge.com/sites/default/files/se-single-string-power-optimizer-application-note-aus.pdf

6) It is not allowed to mix S-series and P-series Power Optimisers in new installations



<sup>(2)</sup> For other connector types please contact SolarEdge

<sup>5)</sup> When using more than a single string, it is allowed to install up to 13500W per string when the maximum power difference between each string is up to 2000W