

# SI series (350 – 1500 W)

Pure Sine Wave Inverters



- Input/output fully isolated for more application flexibility
- Input and output protected against over and under voltage
- “Low power saving mode” < 1 W (350 W) increases system efficiency and reduces costs
- Advanced microprocessor optimises operation processes while reducing energy consumption
- Status indicator for operation verification
- Usual home appliances (supplied from AC mains) can be integrated in a small solar home system (12-48 voltage range)
- Certified for mobile applications (RVs, cars and many more), certification class B

This new product line of inverters converts DC energy from solar modules into clean, stable AC power that is ideal for powering demanding appliances. Phocos inverters are designed for high efficiency: Integrated advanced microprocessor technology combined with pure sine wave output makes them the perfect choice for use with high-end electronics and electrical equipment. Thanks to their low weight and long lifespan, the SI series is also ideal for mobile

and outdoor applications (e.g. RVs, cars and many more).

An extra advantage: THD < 3 %.

As a special, high performance benefit Phocos True Sine Wave Inverters offer a less than 3 per cent THD (total harmonic distortion), providing top performance and superior efficiency. Overload, short circuit, DC over/under voltage and overheating protection are standard on all models.

Type: Model - SI 350	SI350-12110	SI350-12230	SI350-24110	SI350-24230
Rated Power	350 W			
Surge Power	700 W (6 s)			
Input	12 Vdc		24 Vdc	
Voltage range	10.5 to 15.5 Vdc		21.0 to 31.0 Vdc	
Shut down low battery	10.5 Vdc		21.0 Vdc	
Battery Low Voltage Alarm	11.0 Vdc		22.0 Vdc	
Shut down high battery	16 Vdc		32 Vdc	
No load current draw (A) @ nom. Voltage	< 0.65	< 0.9	< 0.32	< 0.5
Save Mode (A) min. @ nom. Voltage	< 0.09		< 0.06	
Output	110 Vac <sup>1</sup>	230 Vac <sup>2</sup>	110 Vac <sup>1</sup>	230 Vac <sup>2</sup>
Output Socket	Universal	Universal	Universal	Universal
Efficiency at rated Vdc, full load %	90	91	91	93
Dimensions	210 x 160 x 73 mm			
Weight	1.6 kg			

**Note:** Due to the high current demanded by inverters, they should be directly connected to the battery terminals.

Selectable:

<sup>1</sup> 100/110/115/120 Vac ± 5%

<sup>2</sup> 200/220/230/240 Vac ± 5%

# SI series (350 – 1500 W)

Pure Sine Wave Inverters

<b>Type: Model - SI 700</b>	<b>SI700-12110</b>	<b>SI700-12230</b>	<b>SI700-24110</b>	<b>SI700-24230</b>	<b>SI700-48110</b>	<b>SI700-48230</b>	
Rated Power	700 W						
Surge Power	1400 W (6 s)						
Input	12 Vdc		24 Vdc		48 Vdc		
Voltage range	10.5 to 15.5 Vdc		21.0 to 31.0 Vdc		42.0 to 60.0 Vdc		
Shut down low battery	10.5 V		21.0 V		42.0 V		
Battery Low Voltage Alarm	11.0 V		22.0 V		44.0 V		
Shut down high battery	16 V		32 V		61 V		
No load current draw (A)	< 1.25	< 1.2	< 0.64	< 0.6	< 0.31	< 0.28	
Stand-by current draw (A)	< 0.25		< 0.15		< 0.08		
Output	110 Vac	230 Vac	110 Vac	230 Vac	110 Vac	230 Vac	
Output Socket	Universal	Universal	Universal	Universal	Universal	Universal	
Efficiency at rated Vdc, full load %	89	91	92	91	93	94	
Dimensions	310 x 192 x 75 mm						
Weight	2.7 kg						
<b>Type: Model - SI 1500</b>	<b>SI1500-24110</b>		<b>SI1500-24230</b>		<b>SI1500-48110</b>		<b>SI1500-48230</b>
Rated Power	1500 W						
Surge Power	3000 W (6 s)						
Input	24 Vdc				48 Vdc		
Voltage range	21.0 to 31.0 Vdc				42.0 to 60.0 Vdc		
Shut down low battery	24.0 Vdc				42.0 Vdc		
Battery Low Voltage Alarm	22.0 Vdc				44.0 Vdc		
Shut down high battery	32 Vdc				61.0 Vdc		
No load current draw (A)	< 0.75		< 0.7		< 0.4		< 0.4
Stand-by current draw (A)	< 0.15				< 0.09		
Output	110 Vac		230 Vac		110 Vac		230 Vac
Output Socket	Universal		Universal		Universal		Universal
Efficiency at rated Vdc, full load %	92		90		93		94
Dimensions	420 x 205 x 90 mm						
Weight	4.8 kg						
<b>All inverters</b>							
AC Regulation	+/- 3%						
Frequency swith select. (Hz)	50/60 +/-0.1%						
Protections	Overload, Short Circuit, DC over/under Voltage, over Temperature						
Waveform	True Sine Wave						
Power factor cos Ø	-90° to + 90°						
Operating temperature	-20° C to + 40° C						
Storage temperature	-30° C to + 70° C						
Max. humidity operating	90%						
Safety Standards	Meet UL458						
Cooling	Load/temperature controlled fan						
Reverse polarity protection	No, will result in permanent damage						
Remote control unit	CR-6 (not for model SI 350) for 12 V and 24 V						

Datasheet\_SI series\_2/2\_e\_2011-08-19\_Subject to change without notice