

SI-ECO Series (500 W)

Pure Sine Wave Inverters



- True sine wave output (THD<2%)
- Power ON-OFF remote control
- Fully isolated input & output
- Load controlled cooling fan
- Advanced microprocessor
- 50/60 Hz switch selectable output frequency
- Input reverse polarity/under voltage/over voltage protections
- Output short-circuit/overload/over temperature protections
- Tri-color indicators display output load level & failure status
- CE, RoHS, Emark-approved
- Type of protection: IP20
- Automatic re-start in case of overload: Every 60 s approx.

This inverter converts DC energy from solar modules into clean, stable AC power that is ideal for power 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-ECO series inverters are also ideal for mobile and outdoor applications (e.g. RVs, cars and also industrial applications). As a special, high performance benefit the THD (total harmonic distortion) of Phocos' true sine wave inverters is below 2%, thus providing superior efficiency. Overload, short-circuit, DC over/under voltage and overheating protection are standard on all models.

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Type	SI-ECO-500			
	-112	-124	-212	-224
AC voltage	100/110/120 VAC		220/230/240 VAC	
Rated power	500 W			
Surge power	1500 W (for a few seconds)			
Waveform	True sine wave (THD <2%)			
Frequency	50/60 Hz \pm 0.5 Hz selectable by DIP switch			
AC regulation	\pm 5%			
Standard receptacles	A, B, C, D, E, F, G, H, I, GFCI (optional at extra cost)			
USB output port	5 V, 2.1 A			
LED indicator	A: Output load level: <20%-off, between 20% and 50% -green, <90%-orange, >90%-red; B: Green for power on, red for protection/failure			
Sleeping mode setting (DIP switch)	S4-frequency 50/60Hz, S3-15% output load, S2-10% output load, S1-5% load setting			
No load current draw	< 0.6 A	< 0.5 A	< 0.6 A	< 0.5 A
DC voltage	12 V	24 V	12 V	24 V
Voltage range (VDC)	10.5~15.0	21.0~30.0	10.5~15.0	21.0~30.0
Efficiency (typ.)	\geq 89.0%	\geq 90.0%	\geq 89.0%	\geq 90.0%
Fuse	30 A*3	15 A*3	30 A*3	15 A*3
Remote control	RC60 (optional)			
Battery low voltage alarm (VDC)	11.0 \pm 0.25	22.0 \pm 0.5	11.0 \pm 0.25	22.0 \pm 0.5
Battery low shut down (VDC)	10.5 \pm 0.25	21.0 \pm 0.5	10.5 \pm 0.25	21.0 \pm 0.5
Overload	Shutdown			
Over voltage (VDC)	15.5 \pm 0.5	31.0 \pm 1.0	15.5 \pm 0.5	31.0 \pm 1.0
Overtemperature	Shut-off output voltage, recover automatically after temperature goes down			
Short-circuit	Shut-off output voltage, restart to recover			
Battery reverse polarity	By fuse open			
Earth leakage	Yes			
Reset voltage after LVS (VDC)	11.8~12.8	23.6~25.6	11.8~12.8	23.6~25.6
Operating temperature	0° C to + 40° C			
Max. humidity	20-90% RH, non-condensing			
Storage temperature & humidity	-30° C to + 70° C, 10-95%			
Safety standards	UL458 (only for GFCI receptacle)			
Isolation resistance	Input-output: 1000 Ohms/500 VDC			
EMC	Compliance to EN61000-6-3:2007 + A1:2011, EN61000-6-1:2007			
LVD	Compliance to EN60950-1:2006 + A11:2009 + A1: 2010 + A12:2011			
Dimensions	255 x 186 x 90 mm			
Cooling fan	Controlled by load			
Weight	1.5 kg			