

## SI-ECO Series (3000 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, E-mark 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.

# SI-ECO Series (3000 W)

Pure Sine Wave Inverters

Type	SI-ECO-3000					
	-112	-124	-148	-212	-224	-248
AC voltage	100/110/120 VAC			220/230/240 VAC		
Rated power	3000 W					
Surge power	9000 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, 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	< 1.2 A	< 0.7 A	< 0.4 A	< 1.2 A	< 0.7 A	< 0.4 A
DC voltage	12 V	24 V	48 V	12 V	24 V	48 V
Voltage range (VDC)	10.5~15.0	21.0~30.0	42.0~60.0	10.5~15.0	21.0~30.0	42.0~60.0
Efficiency (typ.)	$\geq$ 89.0%	$\geq$ 90.0%	$\geq$ 90.0%	$\geq$ 89.0%	$\geq$ 90.0%	$\geq$ 90.0%
Fuse	30 A*4	15 A*12	7.5 A*12	30 A*12	15 A*12	7.5 A*12
Remote control	RC60 (optional)					
Battery low voltage alarm (VDC)	11.0 $\pm$ 0.25	22.0 $\pm$ 0.5	44.0 $\pm$ 1.0	11.0 $\pm$ 0.25	22.0 $\pm$ 0.5	44.0 $\pm$ 1.0
Battery low shut down (VDC)	10.5 $\pm$ 0.25	21.0 $\pm$ 0.5	42.0 $\pm$ 1.0	10.5 $\pm$ 0.25	21.0 $\pm$ 0.5	42.0 $\pm$ 1.0
Overload	Shutdown					
Over voltage (VDC)	15.5 $\pm$ 0.5	31.0 $\pm$ 1.0	62.0 $\pm$ 2.0	15.5 $\pm$ 0.5	31.0 $\pm$ 1.0	62.0 $\pm$ 2.0
Overtemperature	Shuts off output voltage, recovers automatically after temperature goes down					
Short-circuit	Shut-off output voltage, restart to recover					
Battery reverse polarity	Fuse strips					
Earth leakage	Yes					
Reset voltage after LVS (VDC)	11.8~12.8	23.6~25.6	47.2~51.2	11.8~12.8	23.6~25.6	47.2~51.2
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 + A 1:2011, EN 61000-6-1:2007					
LVD	Compliance to EN60950-1:2006 + A 11:2009 + A 1:2010 + A 12:2011					
E-mark	Compliance to E8 10R-03 1272					
Dimensions	426 x 152 x 105 mm					
Cooling fan	Controlled by load					
Weight	6.0 kg, 2 pcs/12.0 kg/Ctn (49.2 x 29 x 32 cm)					