

SI-ECO Series (1500 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.

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| Type | SI-ECO-1500 | | | | | |
|------------------------------------|---|----------------|----------------|-----------------|----------------|----------------|
| | -112 | -124 | -148 | -212 | -224 | -248 |
| AC voltage | 100/110/120 VAC | | | 220/230/240 VAC | | |
| Rated power | 1500 W | | | | | |
| Surge power | 3000 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 | < 0.7 A | < 0.5 A | < 0.3 A | < 0.7 A | < 0.5 A | < 0.3 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 | 320 x 152 x 105 mm | | | | | |
| Cooling fan | Controlled by load | | | | | |
| Weight | 5.2 kg, 2 pcs/10.5 kg/Ctn (39 x 39 x 32 cm) | | | | | |