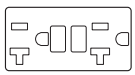
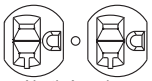
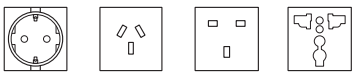
# COTEK 1500W Pure Sine Wave Inverter SP-1500 series

## Features:

- Pure sine wave output
- Power ON / OFF remote control (Green Terminal)
- Remote controller CR-8 / CR-16 (optional)
- Input & Output fully isolation
- Temperature & Load controlled cooling fan
- Built in advance microprocessor to provide friendly interface
- Output frequency 50 / 60 Hz selectable by DIP switch
- Output voltage DIP switch selectable
- Adjustable power saving mode by variable resister
- 3-color LED status indicators
- Input protection: Reverse Polarity (Fuse) / Under Voltage / Over Voltage
- Output protection: Short Circuit / Overload / Over Temperature
- E-13 / UL / CE / FCC approved



| MODEL | | SP-1500-112 | SP-1500-124 | SP-1500-148 | SP-1500-212 | SP-1500-224 | SP-1500-248 |
|---|---|---|---|---|---|---|---|
| Output | AC Voltage | 100 / 110 / 115 / 120VAC | | | 200 / 220 / 230 / 240VAC | | |
| | AC Regulation | ±5% | | | ±3% | | |
| | Rated Power | 1500VA | | | | | |
| | Surge Power ( 1 Sec ) | <2650VA | | | | | |
| | Maximum Output Power (1 Min) | >1500VA~1730VA (100%~115%) | | | | | |
| | Output Waveform | Pure Sine Wave (THD<5%@Normal Load NOTE1) | | | Pure Sine Wave (THD<3%@Normal Load NOTE2) | | |
| | Frequency | 50 / 60 Hz ±0.5% | | | | | |
| Input | DC Voltage | 12VDC | 24VDC | 48VDC | 12VDC | 24VDC | 48VDC |
| | Voltage Range | 10.5 ~ 16.5VDC | 21.0 ~ 33.0VDC | 42.0 ~ 66.0VDC | 10.5 ~ 16.5VDC | 21.0 ~ 33.0VDC | 42.0 ~ 66.0VDC |
| | NO Load Current | ≤1.8A@12VDC | ≤1.0A@24VDC | ≤0.5A@48VDC | ≤1.8A@12VDC | ≤1.0A@24VDC | ≤0.5A@48VDC |
| | Power Saving Mode | <0.1A@12VDC | <0.05A@24VDC | <0.05A@48VDC | <0.1A@12VDC | <0.05A@24VDC | <0.05A@48VDC |
| | Efficiency (Max.) | 91% | 92% | 93% | 93% | 94% | 94% |
| Protection | Input Under - Voltage Protection | 10.5 ±0.3VDC | 21.0 ±0.5VDC | 42.0 ±1.0VDC | 10.5 ±0.3VDC | 21.0 ±0.5VDC | 42.0 ±1.0VDC |
| | Input Under - Voltage Alarm | 11.0 ±0.3VDC | 22.0 ±0.5VDC | 44.0 ±1.0VDC | 11.0 ±0.3VDC | 22.0 ±0.5VDC | 44.0 ±1.0VDC |
| | Input Under - Voltage Recovery | 12.5 ±0.3VDC | 25.0 ±0.5VDC | 50.0 ±1.0VDC | 12.5 ±0.3VDC | 25.0 ±0.5VDC | 50.0 ±1.0VDC |
| | Input Over - Voltage Protection | 16.5 ±0.3VDC | 33.0 ±0.5VDC | 66.0 ±1.0VDC | 16.5 ±0.3VDC | 33.0 ±0.5VDC | 66.0 ±1.0VDC |
| | Input Over - Voltage Recovery | 14.5 ±0.3VDC | 29.0 ±0.5VDC | 58.0 ±1.0VDC | 14.5 ±0.3VDC | 29.0 ±0.5VDC | 58.0 ±1.0VDC |
| | Output Overload | Shutdown output voltage, restart to recover | | | | | |
| | Output Short | Shutdown output voltage, restart to recover | | | | | |
| | Over Temperature | Heat sink temperature over 80°C ±5°C, shutdown output voltage, recover automatically after heat sink temperature goes down to 60°C ±5°C | | | | | |
| | DC Input Reverse Polarity | By fuse | | | | | |
| Environment | Operating Temp. | -20°C ~ +40°C | | | | | |
| | Storage Temp. | -30°C ~ +70°C | | | | | |
| | Storage Temp. & Humidity | 10 ~ 95% RH | | | | | |
| Safety & EMC | Safety Standards | Certified UL 458 NOTE.3 | | ---- | Certified EN 60950-1 | | |
| | EMC Standards | Certified FCC class B | | | Certified EN 55022; EN 55024<br>EN 61000-3-2, -3-3<br>EN 61000-4-2, 3, 4, 5, 6, 8, 11 | | |
| | E-mark | ---- | | | Certified CISPR 25<br>ISO 11452-2; ISO 7637-2 | | |
| Control & Signal | Remote Control (Optional) | CR-8 / CR-16 | | | | | |
| | LED Indicator | Input voltage level, output load level and faulty status | | | | | |
| | Dry Contact Terminal | By relay | | | | | |
| | Remote Control Terminal | 6-port green terminal | | | | | |
| Others | Dimension (W x H x D) | 248x83x421 mm / 9.76x3.27x16.57 inch | | | | | |
| | Packing | 4.14kg; 4pcs / 17.56kg / 3.58CUFT | | | | | |
| | Cooling | Temperature & load controlled cooling fan | | | | | |
| | Application | Home and office appliances, portable power equipment, vehicle, yacht and off-grid Solar power systems ...etc. | | | | | |
| | Socket Type |  North America (GFCI)  North America (NEMA 5-20RI) | | |  Continental European (SCHUKO) Australia / New Zealand United Kingdom Universal | | |

Note1 - Normal Condition: Vin=12.5V / 25V / 50V Vo=100 / 110 / 115 / 120 VAC 80% Full load (PF=1.0)
Note2 - Normal Condition: Vin=12.5V / 25V / 50V Vo=200 / 220 / 230 / 240 VAC 80% Full load (PF=1.0)
Note3 - UL only for GFCI receptacles

## Mechanical Drawings:

