samlexamerica®

1200W

# DC-AC Rackmount Inverter with Transfer Relay
## ∿ Pure Sine Wave

Model

PSR-1200-24
24 VDC- 120 VAC

PSR-1200-48
48 VDC- 120 VAC


## Design Features

- Built-in 16A automatic transfer switch
- On-Line and Off-Line modes
- Load Safe algorithm
- Flexible configurable parameters
- Configurable via front panel, USB, or RS-232C
- Space saving 19" rack 1U enclosure
- Ethernet webpage monitoring
- SNMP Alarm Trap generation for NOC monitoring

## 2 YEAR LIMITED WARRANTY

| | MODEL NO. | PSR-1200-24 | PSR-1200-48 |
|---|---|---|---|
| AC OUTPUT IN INVERTER MODE | OUTPUT VOLTAGE | 100 - 120 VAC (User selectable) ; Default: 120 VAC | |
| | OUTPUT FREQUENCY | 45 - 65 Hz (User Selectable) ; Default: 60Hz | |
| | TYPE & OUTPUT WAVE FORM | High Frequency Type ; Pure Sine Wave | |
| | TOTAL HARMONIC DISTORTION OF OUTPUT WAVFORM | < 2% | |
| | CONTINUOUS OUTPUT POWER | 1200W | |
| | SURGE OUTPUT POWER | 2000W | |
| | PEAK EFFICIENCY | > 88% | > 90% |
| | NEUTRAL ISOLATION | • Neutral bonded to Chassis Ground when Inverter is supplying the load<br>• Neutral isolated from Chassis Ground when Grid is supplying the load | |
| AC OUTPUT IN BYPASS MODE | OUTPUT VOLTAGE | Same as external AC input source | |
| | TYPE OF OUTPUT WAVEFORM | Same as external AC input source | |
| | THD OF OUTPUT WAVEFORM | Same as external AC input source | |
| | CONTINUOUS OUTPUT POWER | 1200W continuous (Protected by 15A AC input breaker) | |
| | RATING OF TRANSFER RELAY | 16A | |
| | TRANSFER RELAY SWITCHING TIME | < 8ms | |
| | TRANSFER TYPE | Synchronized or Unsynchronized (User selectable) | |
| | NEUTRAL ISOLATION | Neutral and Chassis Ground are isolated through internal relay | |
| DC/AC INPUT | NOMINAL DC INPUT VOLTAGE | 24 VDC | 48 VDC |
| | DC INPUT VOLTAGE RANGE | 20 - 34 VDC | 40 - 60 VDC |
| | DC INPUT NO LOAD CURRENT | < 0.6A | < 0.5A |
| | AC INPUT FROM GRID/GENERATOR | Voltage: Programmed value of inverter output voltage (100 - 120 VAC) ± 10%<br>• Default: 120 VAC ±10%<br>Frequency: 50/60 Hz | |
| DISPLAY | LCD | Alphanumeric: 2 lines x 16 characters each | |
| | LEDS | 4 LEDS: AC GRID ; INVERTER ; BYPASS ; ALARM | |
| LOCAL CONTROL & MONITORING | MODE AND PARAMETER SETUP | Through Menus displayed on the LCD screen | |
| | MONITORING OPERATING STATUS | Through LCD screen and 4 LEDs | |
| REMOTE CONTROL & MONITORING | PARAMETER SETUP AND MONITORING USING USB / RS-232 | Through computer screen using ACII coded commands | |
| | MONITORING USING ETHERNET / SNMP | Through computer's Web Browser and Ethernet connection<br>• E-mail notification of faults and alarms<br>Notification of faults and alarms through Ethernet / SNMP Trap Messaging | |
| | WIRED ON/OFF CONTROL THROUGH TERMINALS MARKED ENB (HIGH), ENB(LOW) AND GND | To switch ON:<br>• External + 10 to 40VDC fed to ENB and GND (< 6mA)<br>• Short $\overline{\text{ENB}}$ and GND<br>• Battery Positive fed to ENB | To switch ON:<br>• External + 20 to 60VDC fed to ENB and GND (< 6mA)<br>• Short $\overline{\text{ENB}}$ and GND<br>• Battery Positive fed to ENB |
| | WIRED SIGNALLING | Signaling of faults and alarms through SPDT relay contact switching (no voltage)<br>• Relay contact rating: 240 VAC, 16A | |

Over ▶

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# DC-AC Rackmount Inverter with Transfer Relay

## Pure Sine Wave

Model

PSR-1200-24
24 VDC- 120 VAC

PSR-1200-48
48 VDC- 120 VAC

| MODEL NO. | | PSR-1200-24 | PSR-1200-48 |
|---|---|---|---|
| PROTECTIONS | COOLING | 3 load / temperature controlled fans:<br>• Switch ON when output load is >300W and switch OFF when the load reduces to < 280W<br>• Switch ON when internal heat sink temperature is ≥ 50°C and switch OFF when temperature reduces to ≤ 45°C | |
| | DC INPUT UNDER VOLTAGE (UV) ALARM | 17.0 to 23.0 VDC ; Default: 21.5 VDC<br>(Auto reset at 0.5V > the set voltage) | 34.0 to 46.0 VDC ; Default: 43.0 VDC<br>(Auto reset at 1.0V > the set voltage) |
| | DC INPUT OVER VOLTAGE (OV) ALARM | 25.0 to 35.0VDC ; Default: 33.0VDC<br>(Auto reset at 0.5V < the set voltage) | 50.0 to 62.0 VDC ; Default: 56.0 VDC<br>(Auto reset at 1.0V < the set voltage) |
| | FAN FAULT ALARM | Fan stops | Fan stops |
| | DC INPUT UNDER VOLTAGE PROTECTION (UVP) | 17.0 to 23.0 VDC ; Default: 20.0 VDC | 34.0 to 46.0 VDC ; Default: 40.0 VDC |
| | DC INPUT UNDER VOLTAGE PROTECTION (UVP) RECOVERY | 17.5 to 23.5 VDC ; Default: 23.0 VDC | 35.0 to 47.0 VDC ; Default: 46.0 VDC |
| | DC INPUT OVER VOLTAGE PROTECTION (OVP) | 25.0 to 35.0 VDC ; Default: 34.0 VDC | 50.0 to 62.0 VDC ; Default: 60.0 VDC |
| | DC INPUT OVER VOLTAGE PROTECTION (OVP) RECOVERY | 24.5 to 34.5 VDC ; Default: 33.0 VDC | 49.0 to 61.0 VDC ; Default: 58.0 VDC |
| | OUTPUT OVERLOAD (OL) PROTECTION | • Programmable from 100% to 110%<br>• Default: 110%<br>• Shut down when load is > programmed value for > 2 sec | |
| | SHORT CIRCUIT PROTECTION | Shut down in case of the following:<br>• Output voltage is < 80V RMS for 1.2 sec<br>• Output current is > 24A for 1.2 sec | |
| | OVER TEMPERATURE PROTECTION | Shut down when internal heat sink temperature is >105°C. Auto reset at 85°C. | |
| | DC INPUT OVER CURRENT PROTECTION | 4 pieces of 20A fuses in parallel = 80A<br>**Each fuse:** Mini Blade Fuse, 20A: Littel Fuse 0297020.WXN or equivalent | 4 pieces of 10A fuses in parallel = 40A<br>**Each fuse:** Mini Blade Fuse, 10A: Littel Fuse 0997010.WXN or equivalent |
| | AC INPUT OVER CURRENT PROTECTION | Breaker, 250 VAC, 12A | |
| INPUT /OUTPUT CONNECTIONS | DC INPUT | Terminals with cylindrical hole and set screw<br>• Hole diameter: 7/16"<br>• Set screw: 5/16" x 24 TPI; ½" length; Slotted head | |
| | DC CHASSIS GROUND | Terminal with cylindrical hole and set screw<br>• Hole diameter: 5/16"<br>• Set screw: 5/16" x 24 TPI; 3/8" length; Slotted head | |
| | AC INPUT CONNECTION | • Male AC Power Inlet Connector IEC 60320, C14<br>• Detachable AC Power Cord with mating Connector IEC 60320, C13 on one end and NEMA5-15P Plug on the other end (Supplied with the unit) | |
| | AC OUTPUT CONNECTION | NEMA5-20R Duplex Outlet | |
| SAFETY AND EMI / EMC COMPLIANCE | SAFETY | ETL listed to UL Standard 62368-1 and CSA Standard C22.2 No. 62368-1 | |
| | EMI/EMC | Certified to comply with FCC Part 15(B), Class B | |
| ENVIRONMENT | OPERATING TEMPERATURE RANGE | -20 to +50°C | |
| | RELATIVE HUMIDITY | Up to 90%, non condensing | |
| | STORAGE TEMPERATURE | -30 to +70°C | |
| DIMENSIONS | (W X D X H) MM | 482 X 386.8 X 44 | |
| | (W X D X H) INCHES | 19 X 15.24 X 1.73 | |
| WEIGHT | KG | 5.8 | |
| | LBS | 12.8 | |

**NOTES:**
1. All AC power ratings in the Inverter Section are specified at Power Factor = 0.95
2. All specifications given above are at ambient temperature of 25°C / 77°F unless specified otherwise
3. Specifications are subject to change without notice