



DC-AC Rackmount Inverter with Transfer Relay → Pure Sine Wave

Model PSR-2200-24 24 VDC- 120 VAC PSR-2200-48 48 VDC- 120 VAC

Design Features

- Built-in 30A 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 2U enclosure
- Ethernet webpage monitoring
- SNMP Alarm Trap generation for NOC monitoring

2 YEAR LIMITED WARRANTY



| MODEL NO. | | PSR-2200-24 | PSR-2200-48 |
|-----------------------------------|---|--|--|
| AC OUTPUT IN INVERTER MODE | OUTPUT VOLTAGE | 100 - 120 VAC (User selectal | ble) ; 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 | 2200W @ 120 VAC 2000W @ 100 VAC | |
| | SURGE OUTPUT POWER | 4000W | |
| | PEAK EFFICIENCY | > 90% | > 92% |
| | NEUTRAL ISOLATION | Neutral bonded to Chassis Ground when Inverter is supplying the load 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 | 2200W @ 120 VAC (Protected by 20A AC input breaker) 2000W @ 100 VAC (Protected by 20A AC input breaker) | |
| | RATING OF TRANSFER RELAY | 30A | |
| | TRANSFER RELAY SWITCHING TIME | < 10ms | |
| | 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 | < 0.9A | < 0.7A |
| | AC INPUT FROM GRID/GENERATOR | Voltage: Programmed value of inverter output voltage (100 - 120 VAC) ± 10% • Default: 120 VAC ±10% 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 | ASCII coded command line interface through terminal emulation | |
| | MONITORING USING ETHERNET / SNMP | Through computer's Web Browser and Ethernet connection • E-mail notification of faults and alarms • Notification of faults and alarms through Ethernet / SNMP Trap Messaging | |
| | WIRED ON/OFF CONTROL THROUGH TERMINALS MARKED ENB, ENB AND GND | To switch ON: • External + 10 to 40VDC fed to ENB and GND (< 6mA) • Short ENB and GND • Battery Positive fed to ENB | To switch ON: • External + 20 to 60VDC fed to ENB and GND (< 6mA) • Short ENB and GND • Battery Positive fed to ENB |
| | WIRED SIGNALLING | Signaling of faults and alarms through SPDT relay contact switching (no voltage) • Relay contact rating: 240 VAC, 16A | |



DC-AC Rackmount Inverter with Transfer Relay Pure Sine Wave

Model PSR-2200-24 24 VDC- 120 VAC PSR-2200-48 48 VDC- 120 VAC

| | MODEL NO. | PSR-2200-24 | PSR-2200-48 |
|------------------------------------|--|--|---|
| | COOLING | 3 fans, load / temperature controlled: • Switch ON when load is >600W or heat sink temperature is ≥ 50°C | |
| PROTECTIONS | DC INPUT UNDER VOLTAGE (UV) ALARM | 17.0 to 23.0 VDC ; Default: 21.5 VDC (Auto reset at 0.5V > the set voltage) | 34.0 to 46.0 VDC; Default: 43.0 VDC (Auto reset at 1.0V > the set voltage) |
| | DC INPUT OVER VOLTAGE (OV) ALARM | 25.0 to 35.0VDC; Default: 33.0VDC (Auto reset at 0.5V < the set voltage) | 50.0 to 62.0 VDC ; Default: 56.0 VDC (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% Default: 110% Shut down when load is > programmed value for > 2 sec | |
| | SHORT CIRCUIT PROTECTION | Shut down in case of the following: Output voltage is < 80V RMS for 1.2 sec Output current is > 35A for 1.2 sec | |
| | OVER TEMPERATURE PROTECTION | Shut down when internal heat sink temperature is >95°C. Auto reset at 75°C. | |
| | DC INPUT OVER CURRENT PROTECTION | 6 pieces of 25A fuses in parallel = 150A | 6 pieces of 15A fuses in parallel = 90A |
| | AC INPUT OVER CURRENT PROTECTION | Breaker, 250 VAC, 12A | |
| INPUT /OUTPUT CONNECTIONS | DC INPUT | Nut and bolt: • 5/16" 18 threads per inch • Spring washer: #8 | |
| | DC CHASSIS GROUND | Terminal with cylindrical hole and set screw • Hole diameter: 5/16" • Set screw: 5/16" x 24 TPI; 3/8" length; Slotted head | |
| | AC INPUT CONNECTION | Male AC Power Inlet Connector IEC 60320, C20 Detachable AC Power Cord with mating Connector IEC 60320, C19 on one end and NEMA5- 20P 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 410 X 87.7 | |
| | (W X D X H) INCHES | 19 X 16.14 X 3.5 | |
| WEIGHT | KG | 10.47 | |
| | LBS | 23.08 | |

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

12001-PSR-2200-24-48-0125