



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	<ul style="list-style-type: none"> <li>• Neutral bonded to Chassis Ground when Inverter is supplying the load</li> <li>• Neutral isolated from Chassis Ground when Grid is supplying the load</li> </ul>		
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	
DC/AC INPUT	TRANSFER TYPE	Synchronized or Unsynchronized (User selectable)	
	NEUTRAL ISOLATION	Neutral and Chassis Ground are isolated through internal relay	
	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% • 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 / RS-232	Through computer screen using ACII coded commands	
	MONITORING USING ETHERNET / SNMP	Through computer's Web Browser and Ethernet connection <ul style="list-style-type: none"> <li>• E-mail notification of faults and alarms</li> <li>Notification of faults and alarms through Ethernet / SNMP Trap Messaging</li> </ul>	
	WIRED ON/OFF CONTROL THROUGH TERMINALS MARKED ENB (HIGH), ENB(LOW) AND GND	To switch ON: <ul style="list-style-type: none"> <li>• External + 10 to 40VDC fed to ENB and GND (&lt; 6mA)</li> <li>• Short ENB and GND</li> <li>• Battery Positive fed to ENB</li> </ul> To switch ON: <ul style="list-style-type: none"> <li>• External + 20 to 60VDC fed to ENB and GND (&lt; 6mA)</li> <li>• Short ENB and GND</li> <li>• Battery Positive fed to ENB</li> </ul>	
	WIRED SIGNALLING	Signaling of faults and alarms through SPDT relay contact switching (no voltage) <ul style="list-style-type: none"> <li>• Relay contact rating: 240 VAC, 16A</li> </ul>	

Over ▶



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24 VDC- 120 VAC  
PSR-1200-48  
48 VDC- 120 VAC

# 1200W

MODEL NO.	PSR-1200-24	PSR-1200-48
COOLING	3 load / temperature controlled fans: <ul style="list-style-type: none"> <li>Switch ON when output load is &gt;300W and switch OFF when the load reduces to &lt; 280W</li> <li>Switch ON when internal heat sink temperature is ≥ 50°C and switch OFF when temperature reduces to ≤ 45°C</li> </ul>	
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	<ul style="list-style-type: none"> <li>Programmable from 100% to 110%</li> <li>Default: 110%</li> <li>Shut down when load is &gt; programmed value for &gt; 2 sec</li> </ul>	
SHORT CIRCUIT PROTECTION	Shut down in case of the following: <ul style="list-style-type: none"> <li>Output voltage is &lt; 80V RMS for 1.2 sec</li> <li>Output current is &gt; 24A for 1.2 sec</li> </ul>	
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 Each fuse: Mini Blade Fuse, 20A: Littell Fuse 0297020.WXN or equivalent	4 pieces of 10A fuses in parallel = 40A Each fuse: Mini Blade Fuse, 10A: Littell 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 <ul style="list-style-type: none"> <li>Hole diameter: 7/16"</li> <li>Set screw: 5/16" x 24 TPI; 1/2" length; Slotted head</li> </ul>
	DC CHASSIS GROUND	Terminal with cylindrical hole and set screw <ul style="list-style-type: none"> <li>Hole diameter: 5/16"</li> <li>Set screw: 5/16" x 24 TPI; 3/8" length; Slotted head</li> </ul>
	AC INPUT CONNECTION	<ul style="list-style-type: none"> <li>Male AC Power Inlet Connector IEC 60320, C14</li> <li>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)</li> </ul>
	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:**

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

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