



1500W  
samlexamerica



**DC-AC Inverter**  
Pure Sine Wave

Model  
ST1500  
12 ~ 48 VDC

**Design Features**

- Pure sine wave output (THD < 3%)
- Built-in 30 A transfer relay and 30 A AC circuit breaker
- AC output of the inverter is kept synchronized in frequency and in phase with the AC input source to protect the load and the inverter for faster transfer
- Switch selectable output frequency: 50 / 60 Hz
- Switch selectable Power Save Mode (Sleep Mode) wherein the inverter shuts off non essential circuitry and reduces its no load self consumption. It searches for load and wakes up when it sees a minimum programmed load (40 – 280 W)
- Remote on/off control through external contact closure by mechanical / transistor switch
- Optional wired remote controls for on / off and monitoring the operation. Includes Ignition Lockout and Reverse Override Function (ROF)
- Input and output are fully isolated
- Advanced micro-controller
- Load controlled cooling fan saves power consumption
- 3 tri-color LEDs display operational status and fault indications
- **Protections:** overload; short circuit; leakage; low and high DC input voltages; high temperature; reverse polarity
- **Safety:** Meets UL-458 (Pending listing)
- **EMC:** Complies with FCC Part 15(B), Class A

**2 YEAR WARRANTY**

	MODEL NO.	ST1500-112	ST1500-124	ST1500-148
OUTPUT IN INVERTER MODE	OUTPUT VOLTAGE	120 VAC +/- 5%		
	OUTPUT FREQUENCY	50 / 60 Hz (Switch selectable)		
	TYPE OF OUTPUT WAVEFORM	Pure Sine Wave		
	TOTAL HARMONIC DISTORTION	< 3%		
	CONTINUOUS OUTPUT POWER (At Power Factor = 1)	1500 W		
	SURGE OUTPUT POWER (At Power Factor = 1)	3000 W		
AC OUTPUT CONNECTIONS	PEAK EFFICIENCY (At full load)	88%	91%	92%
	AC OUTPUT CONNECTIONS	Terminal Block for hard wiring		
OUTPUT IN BY-PASS MODE	OUTPUT VOLTAGE	Same as external AC input source		
	OUTPUT FREQUENCY	Same as external AC input source		
	TYPE OF OUTPUT WAVEFORM	Same as external AC input source		
	TOTAL HARMONIC DISTORTION	Same as external AC input source		
INPUT	CONTINUOUS OUTPUT POWER	Load to be limited to 1500 W. Protected by 30 A breaker		
	NOMINAL DC INPUT VOLTAGE	12 VDC	24 VDC	48 VDC
	DC INPUT VOLTAGE RANGE	10.5 to 15 VDC	21 to 30 VDC	42 to 60 VDC
	DC INPUT CURRENT AT NO LOAD (Power Save enabled)	0.28 A	0.15 A	0.09 A
	DC INPUT CURRENT AT NO LOAD (Power Save disabled)	1.45 A	0.75 A	0.4 A
	DC INPUT CONNECTIONS	M-8 nut & bolt / Wire with M-8 ring lug terminal		
AC INPUT CONNECTIONS	Terminal Block for hard wiring			
POWER SAVE (SLEEP) MODE	ENABLED OR DISABLED BY DIP SWITCHES	Wake up threshold: 40 to 280 W (Selected by DIP Switches)		
TRANSFER SWITCH	RATING	30 A		
LOCAL DISPLAY	SWITCHING TIMES	AC input source to inverter: 16-50 msec; Inverter to AC input source : 8 -10 msec		
REMOTE OPERATION & INDICATIONS	LED DISPLAY	Three, 3-color (Green, Orange, Red) LEDs for operational and fault status		
PROTECTIONS	WIRED ON/OFF CONTROL	By external contact closure through mechanical / transistor switch		
	OPTIONAL REMOTE CONTROL PANEL (SIMPLE)	SR-8		
	OPTIONAL REMOTE CONTROL PANEL (UPGRADED)	Nil		
	LOW DC INPUT VOLTAGE ALARM	SR6-12	SR6-24	Nil
	LOW DC INPUT VOLTAGE SHUTDOWN	11 VDC	22 VDC	44 VDC
	HIGH DC INPUT VOLTAGE SHUTDOWN	10.2 VDC	20.3 VDC	40.8 VDC
	SHORT CIRCUIT SHUTDOWN	15.3 VDC	30.6 VDC	61.2 VDC
OVERLOAD SHUTDOWN	Yes			
OVER TEMPERATURE SHUTDOWN	Yes			
REVERSE POLARITY ON DC INPUT SIDE	Yes			
OVERLOAD PROTECTION - AC INPUT SOURCE	Yes. Internal fuses will blow 30 A Circuit Breaker			
COOLING	FORCED AIR COOLING	1 fan. Will switch on / off at specified values of load		
COMPLIANCE	SAFETY	Meets UL Standard UL-458 (pending listing)		
ENVIRONMENT	EMI / EMC	Meets FCC Part 15(B), Class A		
	OPERATING TEMPERATURE RANGE	0 °C to + 40 °C		
DIMENSIONS	STORAGE TEMPERATURE RANGE	- 30 °C to 70 °C		
	(L X W X H), MM	403 x 236 x 115		
WEIGHT	(L X W X H), INCHES	15.9 x 9.29 x 4.53		
	KG	7.0		
	LBS	15.4		

NOTE: Specifications are subject to change without notice