



**DC-AC Inverter  
With Transfer Switch  
Pure Sine Wave**

**Model  
ST1000  
12 ~ 48 VDC**

### Design Features

- Built-in 35A transfer relay and 12A 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 Power Save Mode (Sleep Mode)
- 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 Over-ride 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

**2 YEAR WARRANTY**

	MODEL NO.	ST1000-112	ST1000-124	ST1000-148
<b>OUTPUT IN INVERTER MODE</b>	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)		1000W	
	SURGE OUTPUT POWER (At Power Factor = 1)		2000W	
	PEAK EFFICIENCY (At full load)	88%	90%	92%
	AC OUTPUT CONNECTIONS	Terminal Block for hard wiring		
<b>OUTPUT IN BY-PASS MODE</b>	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		
	CONTINUOUS OUTPUT POWER	Load to be limited to 1000W. Protected by 12A breaker		
<b>INPUT</b>	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)	0.25A	0.15A	0.09A
	DC INPUT CURRENT AT NO LOAD (Power Save disabled)	1.43A	0.75A	0.38A
	DC INPUT CONNECTIONS	M-8 nut & bolt / Wire with M-8 ring lug terminal		
	AC INPUT CONNECTIONS	Terminal Block for hard wiring		
<b>POWER SAVE (SLEEP) MODE</b>	ENABLED OR DISABLED BY DIP SWITCHES	Wake up threshold: 20 to 135W (Selected by DIP Switches)		
<b>TRANSFER SWITCH</b>	RATING	35A		
	SWITCHING TIMES (Power Save OFF)	AC input source to inverter: 16-50 msec; Inverter to AC input source : 8-10 msec		
<b>LOCAL DISPLAY</b>	LED DISPLAY	Three, 3-color (Green, Orange, Red) LEDs for operational and fault status		
<b>REMOTE OPERATION &amp; INDICATIONS</b>	WIRED ON/OFF CONTROL	By external contact closure through mechanical / transistor switch		
	OPTIONAL REMOTE CONTROL PANEL (SIMPLE)	S-R8		
	OPTIONAL REMOTE CONTROL PANEL (UPGRADED)	S-R6-12	S-R6-24	Nil
<b>PROTECTIONS</b>	LOW DC INPUT VOLTAGE ALARM	11 VDC	22 VDC	44 VDC
	LOW DC INPUT VOLTAGE SHUTDOWN	10.2 VDC	20.3 VDC	40.8 VDC
	HIGH DC INPUT VOLTAGE SHUTDOWN	15.3 VDC	30.6 VDC	61.2 VDC
	SHORT CIRCUIT SHUTDOWN	Yes		
	OVERLOAD SHUTDOWN	Yes		
	OVER TEMPERATURE SHUTDOWN	Yes		
	REVERSE POLARITY ON DC INPUT SIDE	Yes. Internal fuses will blow		
<b>COOLING</b>	OVERLOAD PROTECTION - AC INPUT SOURCE	12A Circuit Breaker		
	FORCED AIR COOLING	1 fan. Will switch ON/OFF at specified values of load		
<b>COMPLIANCE</b>	SAFETY	Meets UL Standard UL-458 (pending listing)		
	EMI	Meets FCC Part 15(B), Class A		
<b>ENVIRONMENT</b>	OPERATING TEMPERATURE RANGE	0°C to + 40°C / 32°F to 104°F		
	STORAGE TEMPERATURE RANGE	- 30°C to 70°C / - 22°F to 158°F		
<b>DIMENSIONS</b>	(W X D X H), MM	236 x 373 x 115		
	(W X D X H), INCHES	9.29 x 14.7 x 4.53		
<b>WEIGHT</b>	KG	6.2		
	LBS	13.6		

NOTE: Specifications are subject to change without notice

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