



**samlex**america®

# 450W



## DC-AC Inverter Modified Sine Wave

Model  
SAM-450-12E  
12 VDC - 230 VAC

**2 YEAR WARRANTY**

### Design Features

- Modified Sine Wave output
- Soft Start Technology - prevents shut down due to over current on cold start of AC loads
- USB charging port: 5V, 500 mA
- Load controlled fan saves power during low load conditions
- Protection against short circuit, overload, low and high DC input voltages, over temperature and leakage
- Light weight and compact aluminum enclosure

		MODEL NO.	SAM-450-12E
INPUT	BATTERY SYSTEM VOLTAGE	12 VDC	
	NOMINAL INPUT VOLTAGE	12.5 VDC	
	INPUT VOLTAGE RANGE	> 10.5 VDC to < 15.5 VDC	
	INPUT CURRENT AT CONTINUOUS POWER	41.3 A to 43.3 A	
	INPUT CURRENT AT NO LOAD	0.25 A to 0.35 A	
	DC SIDE GROUNDING	DC Negative (-) input terminal bonded to chassis	
OUTPUT	OUTPUT VOLTAGE WAVE FORM	Modified Sine Wave	
	OUTPUT VOLTAGE; FREQUENCY	230 VAC + 10% / -2%; 50 Hz ± 5%	
	AC OUTPUT SIDE GROUNDING	Both AC current carrying conductors isolated from chassis	
	OUTPUT POWER, CONTINUOUS (RESISTIVE LOAD)	450 W	
	OUTPUT POWER, SURGE (< 1 SEC, RESISTIVE LOAD)	900 W	
	PEAK EFFICIENCY (AT 50% OF CONTINUOUS POWER)	90%	
PROTECTIONS	USB CHARGING PORT	5 VDC, 500mA	
	LOW INPUT VOLTAGE ALARM	10.8 VDC. Auto reset at > 10.8 VDC	
	LOW INPUT VOLTAGE SHUTDOWN	10.5 VDC. Auto reset at 11.5 VDC	
	HIGH INPUT VOLTAGE SHUTDOWN	15.5 VDC. Auto reset at < 15.5 VDC	
	OVERLOAD AND LEAKAGE SHUT DOWN	Latches in shutdown condition. Manual reset by switching off the ON/OFF switch, waiting for 3 minutes and switching on the ON/OFF switch	
	COOLING	Load controlled fan. Comes on at 8 to 12W	
	OVER TEMPERATURE SHUTDOWN	By sensing internal hot spot. Auto reset on cooling	
CONNECTIONS	INTERNAL INPUT FUSE, 32 V	70 A (2 X 35 A)	
	BATTERY INPUT	Red (+) & Black (-) thumb screws; M4 size	
	AC OUTPUT	Universal outlet	
	USB OUTPUT	USB connector	
GENERAL	ACCESSORIES SUPPLIED	Battery input cable set with battery clamps Battery input cable set with cigar plug	
	OPERATING TEMPERATURE RANGE	0 to 25 C at 100% loading; 26°C to 35°C at 80% loading	
	OPERATING HUMIDITY	< 80%	
	DIMENSIONS (L x W x H)	154 x 154 x 46 mm; 6 x 6.1 x 1.8 inches (size includes protrusions)	
	WEIGHT	0.6 kg.; 1.3 lb.	