

COOPER LIGHTING SOLUTIONS - SURE-LITES®

DESCRIPTION

The Sure-Lites Lifeway II Single Phase inverter is an interruptible, PWM inverter type utilizing IGBT technology with 50ms transfer time. Should utility power fail, the Lifeway II Single Phase inverter takes over and provides output power to the critical load. The Lifeway II Single Phase inverter is designed to provide back-up power to incandescent and fluorescent loads. Its sealed lead calcium batteries will power emergency lighting circuits for 90 minutes (UL 924). Other run times and voltages are available. Please consult your Cooper Lighting Solutions representative.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Electrical

- Input 120 or 277VAC 1 phase 2 wire
- Output 120 or 277VAC 1 phase
- Output load power factor 0.5 lag to 0.5 lead
- Electronic and magnetic ballast compatible
- Output distortion less than 3% THD for linear loads
- Forced air cooling only during emergency operation, no filters required
- Generator compatibility
- 90 minute runtime standard; other runtimes available upon request
- Custom voltages available
- Supports LED and HID Lighting

Standard Features

- 98% efficient
- PWM/IGBT technology
- Micro-processor control
- User programmable with password protection
- Self-Testing and Self-Diagnostic with Event, Test and Alarm Logs (includes 5 minute monthly test and 90 minute annual test)
- RS232 communications port
- Input circuit breaker
- Modular design
- Low audible noise
- Normally off output

Code Compliance

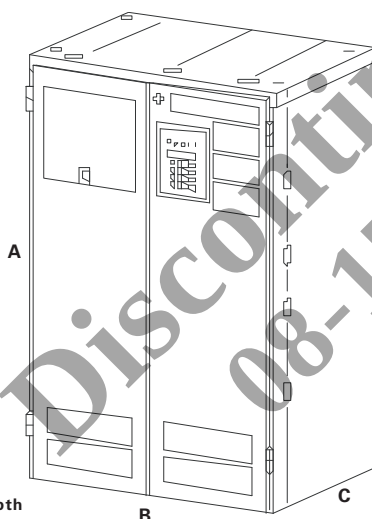
- UL 924 Listed

Application

- Fluorescent and Incandescent Lighting

Warranty

- Limited Manufacturer's One (1) Year Warranty On All Electronics*
- Limited Manufacturer's Two (2) Year Warranty On All Electronics with Start-Up Service*
- Limited Manufacturer's Battery Warranty: One (1) Year Full Value Warranty; 9 Years, Pro Rata



Height	Width	Depth
A	B	C
47"	30"	25"

* Additional Warranty Details Upon Request



LIFEWAY II SINGLE PHASE IPS SERIES

1.5 - 16.7 KVA
FLUORESCENT
INCANDESCENT

Single Phase, IPS

Incandescent
Fluorescent

Schools
Colleges
Prisons
Industrial
Casinos
Offices
Shopping Malls
Military Complexes
Airports
Railway & Transit
Sports Facilities
FAA
911 Facilities
Hotels & Motels
Hospitals
Race Tracks

ORDERING INFORMATION

Series	KVA Rating	Voltage Input	Voltage Output
IC: Single Phase IPS	1: 1.5 2: 2.25 3: 3.0 4: 3.75 5: 5.0 6: 6.0 7: 8.0 8: 10.0 9: 12.5 10: 16.7	120 277 Notes: * See Optional Features on back.	120 277

SPECIFICATION DATA

Input:

Voltage	120 or 277VAC 1-phase 2-wire +10% - 15%. Contact factory for all other voltages.
Input Power	Walk-in Limiting inrush current to less than 125%, 10 times for 1 line cycle
Input Frequency	60Hz, +/-3%, 50Hz available upon request
Synchronizing Slew Rate	1Hz per second nominal
Protection	Input Circuit Breaker
Harmonic Distortion	<10%
Power Factor	0.5 lag/lead

Output:

Voltage	120 or 277VAC 1-phase 2-wire. Contact factory for all other voltages.
Static Voltage	Load current change +/-2%, battery discharge +/-12.5%
Dynamic Voltage	+/-2% for +/-25% load step change, +/-3% for a 50% load step change, recovery within 3 cycles
Harmonic Distortion	<3% THD for linear load
Overload	Fuse protected
Output Frequency	60Hz +/- 0.05Hz during emergency mode
Load Power Factor	0.5 lag to 0.5 lead
Inverter Overload	125% for 5 minutes
Protection	Optional Distribution Circuit Breakers

Battery:

Type	Valve-regulated sealed lead calcium (standard).
Charger	Microprocessor controlled for various battery types and temperature compensating (recharge per UL924 spec)
Protection	Automatic low-battery disconnect; automatic restart upon utility return.
Disconnect	Fuse
Optional Runtimes	Extended runtimes available.

Environmental:

Altitude	<10,000 feet (above sea level) without de-rating
Operating Temperature	System operates safely from 0° to 40°C (32° to 104°F) up to 95% humidity. UL rating, 20° to 30°C (68° to 86°F) includes battery performance which can be affected by temperature. Contact factory for details.
Storage Temperature	-20° to 70° Celsius (electronics only)
Relative Humidity	<95% (non-condensing)

General:

Design	Standby-no break. PWM inverter-type utilizing IGBT technology with 50mS transfer time.
Generator Input	Compatible with generators
Control Input	Microprocessor controlled 2 x 20-character display with touch pad controls & functions
	5 LED indicators & alarm with ring-back feature
Metering	Input & Output Voltage, Battery Voltage, Battery & Output Current, Output VA, Temperature, Inverter Wattage
Alarms	High/Low Battery Charger Fault, Near Low Battery, Low Battery, Load Reduction Fault, Output Overload, High/Low AC Input Volts, High Ambient Temperature, Inverter Fault, Output Fault, Optional Circuit Breaker Trip
Communications	RS-232 port (DB9)
Manual Maintenance Bypass	Optional internal or optional external without internal distribution breakers.
Alarm Contacts	Optional Summary Form "C" Contacts
Warranty	1 year standard warranty includes all parts, labor, & travel expenses within 48 contiguous states. Up to 10 years prorated warranty on batteries. Extended warranties, preventative maintenance and customized service plans are available.
Factory Start-up	Purchase factory start-up & receive 1 additional year of warranty.

Optional Features:

Auto Dialer, Battery Charger Upgrade, Dimming Bypass Relay, Extended Factory Warranty, Factory Startup and Training, Fax/Modem, Maintenance Bypass Switch, Output Circuit Breakers, Output Trip Alarms, Remote Meter Panel, Remote Summary Alarm Panel, Seismic Mounting, Summary Alarm Dry Contact, Summary Form C Contacts, and Variable Time Delay.

Physical:

Cabinet	Freestanding NEMA Type 1
Cooling	Forced Air, during emergency mode
Cable Entry	Top or side
Access	Front

Part #	Inverter Electronics Module									Batteries		Battery Module								AC Input																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Power Rating (kVA)											Voltage (VDC)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Power Rating (kW)											Current (Amperes)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Efficiency (@ full load)											Run Time (mins)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Audible Noise (dBA @1m) ¹									Number of Batteries		Number of Battery Cabinets																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Heat Loss (BTU)											Cabinet Dimensions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</