

COOPER LIGHTING SOLUTIONS - SURE-LITES®

DESCRIPTION

The Sure-Lites Lifeway II C Series is a single phase inverter that provides uninterrupted power. This pulse width modulated inverter utilizes IGBT technology and has a 2 millisecond transfer time. The unit's operating efficiency is 98%, well above a typical fast transfer inverter. The C Series inverter is UL 924 listed and meets NFPA 101 requirements by providing 90 minutes of illumination for emergency egress lighting. 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

Code Compliance

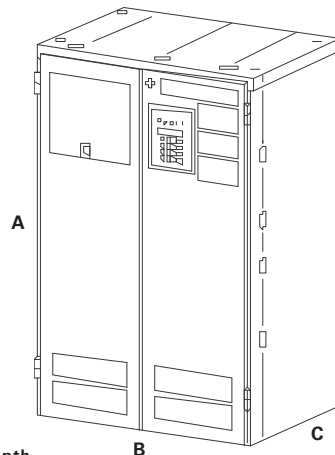
- UL 924 Listed

Application

- HID, 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 C SERIES

1.5 - 16.7 KVA

HID
FLUORESCENT
INCANDESCENT

Single Phase, UPS

HID
Fluorescent
Incandescent

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
ISC: Single Phase C	015: 1.5 022: 2.25 030: 3.0 037: 3.75 048: 4.8 060: 6.0 080: 8.0 100: 10.0 125: 12.5 167: 16.7	120 277	120 277
		Notes: * See Optional Features on back.	

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%
 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-by no break. PWM inverter type utilizing IGBT technology with 2mS 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.
 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, Normally Off Output, 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)		Power Rating (kW)		Efficiency (@ full load)		Audible Noise (dBA @ 1m')		Heat Loss (BTU)		Number of Batteries	Voltage (VDC)		Current (Amperes)		Run Time (mins)		Number of Battery Cabinets	120VAC		277VAC		
	Width	Height	Depth	Weight	Width	Height	Depth	Weight	Total Weight	Width		Height	Depth	Weight	Width	Height	Depth		Weight	Running	Maximum	Running	Maximum
	in/cm	in/cm	in/cm	lbs/kg	lbs/kg	in/cm	in/cm	in/cm	lbs/kg	lbs/kg	in/cm	in/cm	in/cm	lbs/kg	in/cm	in/cm	in/cm	lbs/kg					
ISC015	1.5	1.5	98	45	75	30/77	47/120	25/64	250/114	296/135	4	48	39	90	na ²	na ²	na ²	na ²	na ²	12.9A	16A	5.5A	7A
ISC022	2.25	2.25	98	45	100	30/77	47/120	25/64	265/121	444/202	6	72	38	90	na ²	na ²	na ²	na ²	na ²	19.3A	24A	8.3A	11A
ISC030	3.0	3.0	98	45	160	30/77	47/120	25/64	295/134	592/269	8	96	38	90	na ²	na ²	na ²	na ²	na ²	25.7A	32A	11.1A	14A
ISC037	3.75	3.75	98	45	200	30/77	47/120	25/64	305/139	740/336	10	120	37	90	na ²	na ²	na ²	na ²	na ²	32.1A	39A	13.9A	17A
ISC048	4.8	4.8	98	45	245	30/77	47/120	25/64	315/143	888/403	12	144	40	90	na ²	na ²	na ²	na ²	na ²	41.2A	50A	17.8A	22A
ISC060	6.0	6.0	98	45	300	30/77	47/120	25/64	350/159	1110/504	15	180	40	90	30/77	47/120	25/64	210/96	1	51.5A	63A	22.3A	27A
ISC080	8.0	8.0	98	45	400	30/77	47/120	25/64	375/171	1480/672	20	240	39	90	30/77	47/120	25/64	232/106	1	68.6A	84A	29.7A	36A
ISC100	10.0	10.0	98	45	500	30/77	47/120	25/64	435/198	1776/806	24	144	82	90	30/77	47/120	25/64	420/191	2	85.8A	105A	37.1A	45A
ISC125	12.5	12.5	98	45	660	30/77	47/120	25/64	465/211	2220/1007	30	180	82	90	30/77	47/120	25/64	420/191	2	107.2A	131A	46.4A	57A
ISC167	16.7	16.7	98	45	840	30/77	47/120	25/64	530/241	2960/1343	40	240	80	90	30/77	47/120	25/64	464/211	2	143.3A	174A	62.0A	76A

