Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	

WaveLinx Wired
ILS-SCMA0401

IL Area Controller with one, two or three SCMA-0401module. Each SCMA0401 module offers four adaptive (forward and reverse phase) dimming channels and one iCAN communication interface

Typical Applications

Office • Education • Healthcare • Hospitality • Retail • Industrial • Manufacturing

Interactive Menu

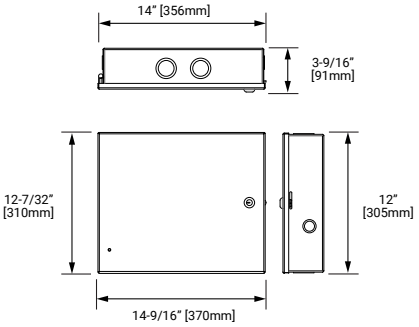
Product Certification

- Manufactured in an ISO 9001 certified factory

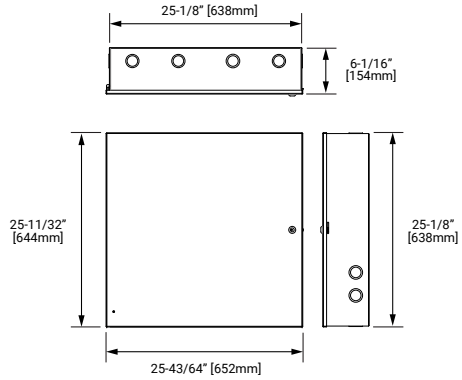
Top Product Features

- Four 100W phase-cut dimming module - Control popular load such as luminaires with incandescent/halogen lamps or fluorescent ballasts, LED luminaires and LED/CF lamps
- Selectable phase cut dimming with built-in relay - Dim and turn on/off forward and reverse phase ballasts/drivers
- Scalable dimming curve - Optimize the usable dimming range of a load
- iCAN Communication interface - Connect the controller with other SCM controllers (SCMD, SCMR, SCMH) to control spaces with different types of control devices
- Channel pairing option - Ability to control loads with higher wattage

Dimensional Details



Small panel configuration



Medium panel configuration

Order Information

Catalog Number

Catalog Number	Description
ILS-SCMA0401-1	WaveLinx Wired ILS enclosure with one SCMA401 adaptive dimming controller
ILM-SCMA0401-2	WaveLinx Wired ILS enclosure with two SCMA401 adaptive dimming controller
ILM-SCMA0401-3	WaveLinx Wired ILS enclosure with three SCMA401 adaptive dimming controller

Product Specifications

Key Features

- Selectable dimming modes –trailing edge, leading edge and switched
- Scalable dimming curve to optimize the usable dimming range of a load
- No minimum load
- Quiet dimming operation
- Configurable Alarm Input (volt free)
- Short Circuit protection per channel
- Push buttons for local testing of channel outputs

Mechanical

Enclosure Size:

- Small: 14.56" W X 12.22" H X 3.56" D (369.8mm x 310.4mm x 90.4mm)
- Medium: 25.67" W X 25.34" H X 6.06" D (652mm x 643.6mm x 153.9mm)

Weight:

- Small: 10lbs (4.5 kg)
- Medium: 33lbs (15 kg)

Environment:

- **Operating temperature:** 35°F to 122°F (+2°C to +50°C)
- **Max storage temperature:** 140°F (+60°C)
- **Relative humidity:** 5 to 95% non-condensing

IP rating: IP20

Electrical

Mains supply: 120 – 277V AC +/-10%, 50/60 Hz
Supply protection: Provided by installer (6A Type C MCB recommended)
Max Output power:

Channel Pairing	Voltage	Power per branch circuit
Single	120VAC	100W
Single	220-270VAC	190W
Dual	120VAC	200W
Dual	220-270VAC	380W

No minimum load
Note: Pairing combinations allowed (1+2) and/or (3+4) only

CAN power consumption: 85mA

Note: There are no industry standards for mains dimmable LED designs.
Individual lamp performance and dimming ranges vary considerably between manufacturers, models and even over time. Always refer to the lamp manufacturer's recommended limits for leading/trailing edge operation, de-rating of load and maximum number of lamps per circuit.

This is often limited to less than 10 lamps per circuit regardless of load. In all circumstances it shall be the responsibility of the installer to check lamp compatibility in advance or arrange proving tests/quantities as necessary.

Connections

- Mains terminals: Maximum cable size 14AWG
- Channel terminals: Maximum cable size 1 x 14AWG or 2 x 16AWG

Standards/Ratings

- cULus Listed - Energy Management Equipment (UL916)
- Manufactured in an ISO9001:2015 certified factory
- Meets ASHRAE Standard 90.1 requirements
- Meets IECC 2015 requirements
- Meets CEC Title 24 requirements

Environmental Regulations:

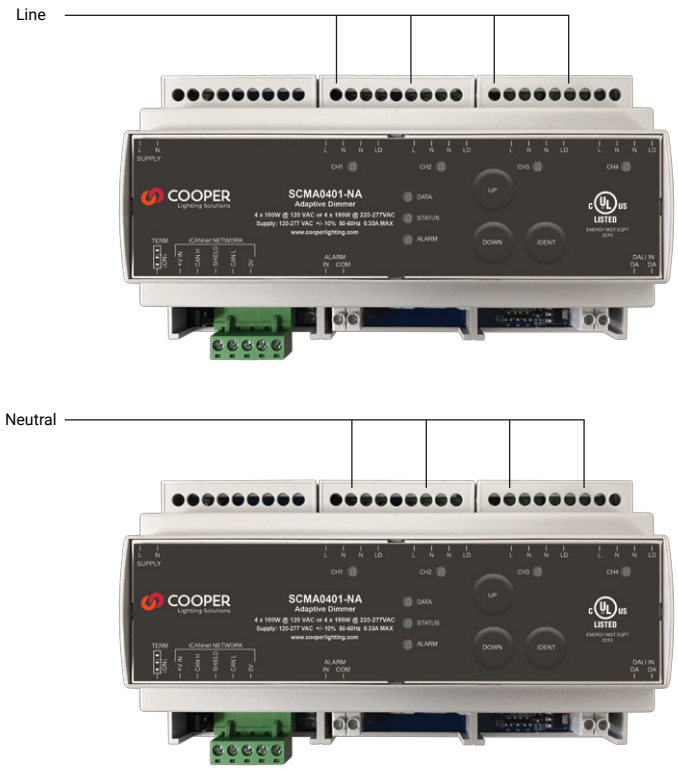
- RoHS Directive 2011/65/EU

Warranty

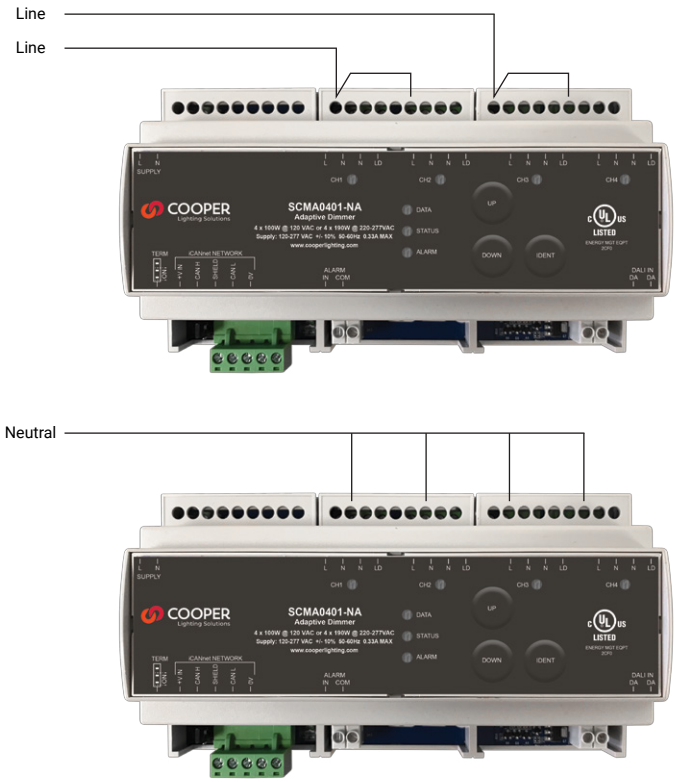
Five year warranty standard

Wiring Diagrams

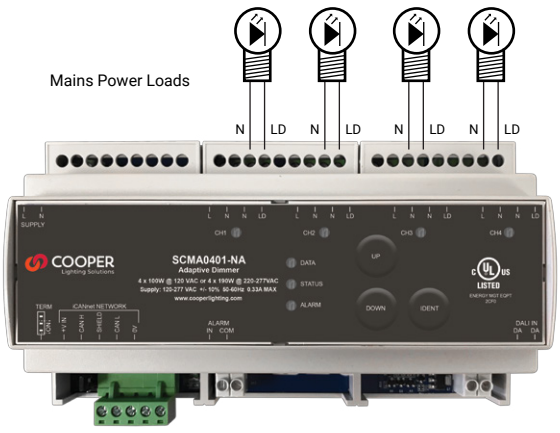
Single channel AC



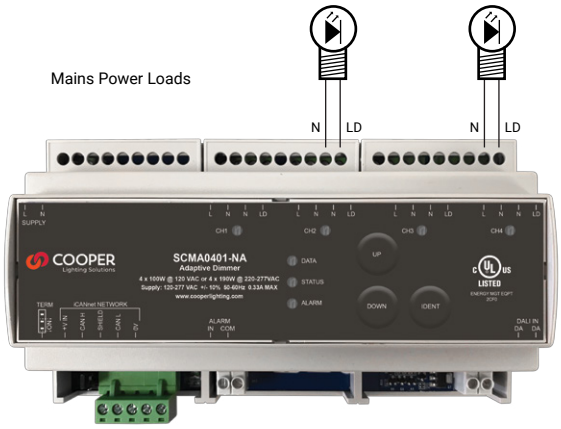
Dual channel AC



Single channel Load

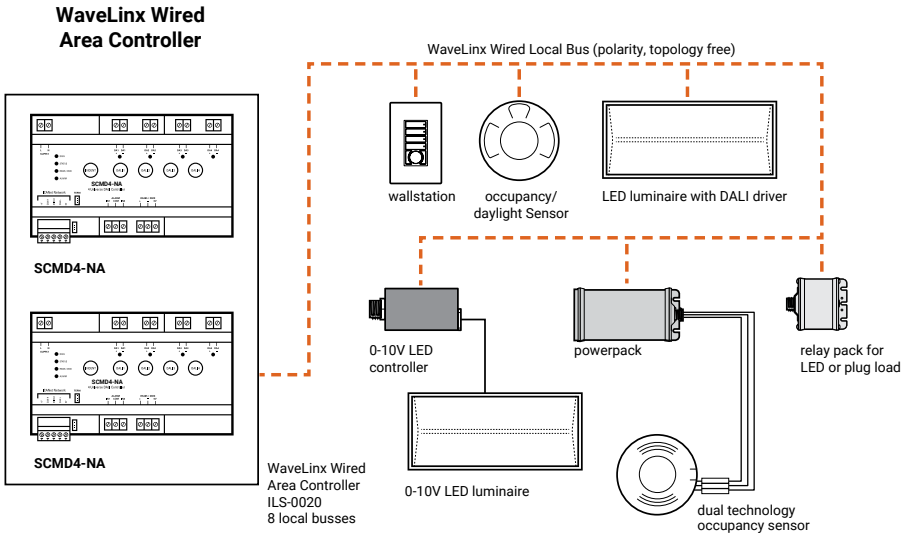


Dual channel Load

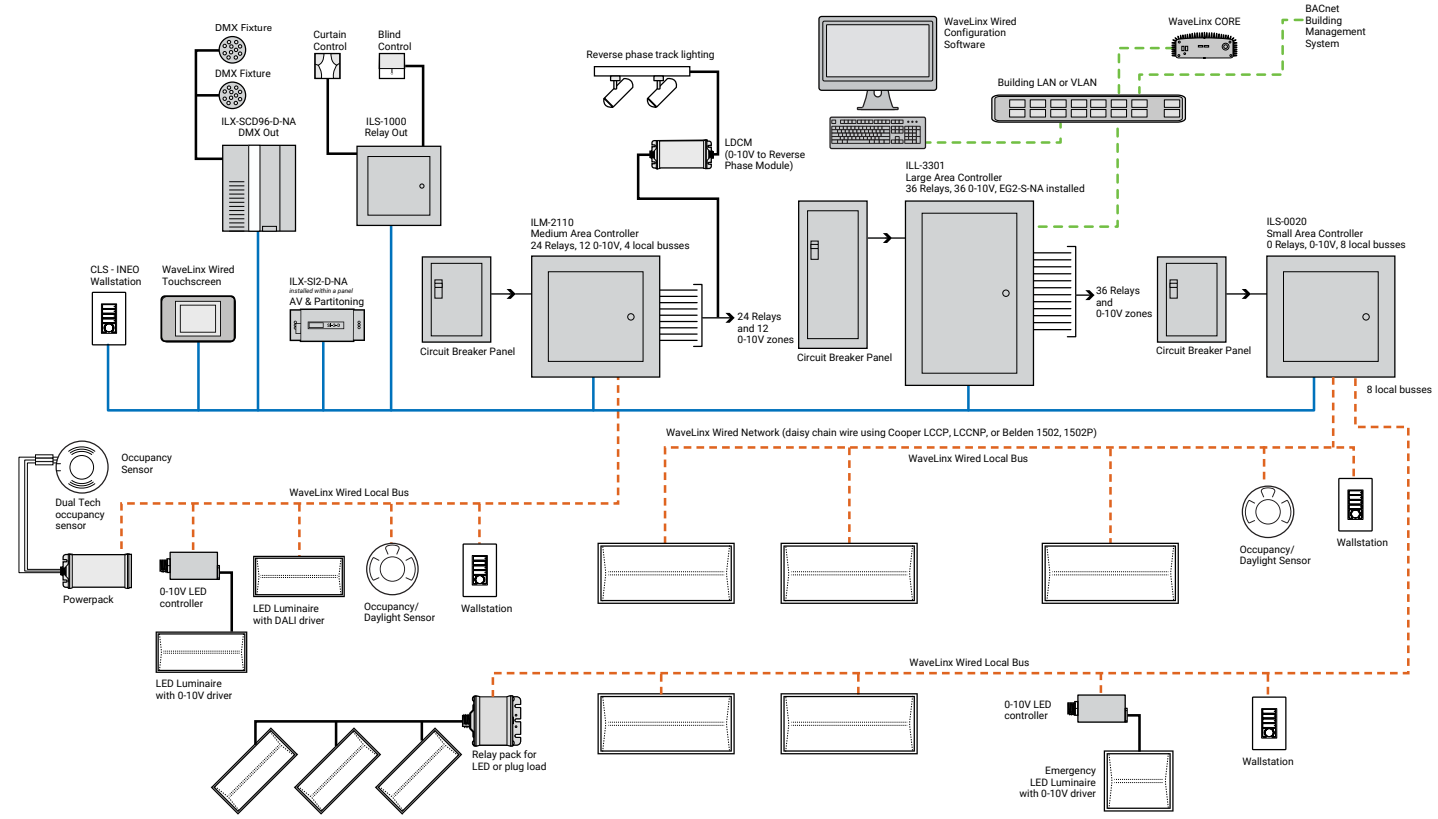


System architecture

Simple WaveLinx Wired system



Complete WaveLinx Wired system



Sample System Topology:

This diagram shows the main components of the WaveLinx wired and PRO wireless connected lighting system.

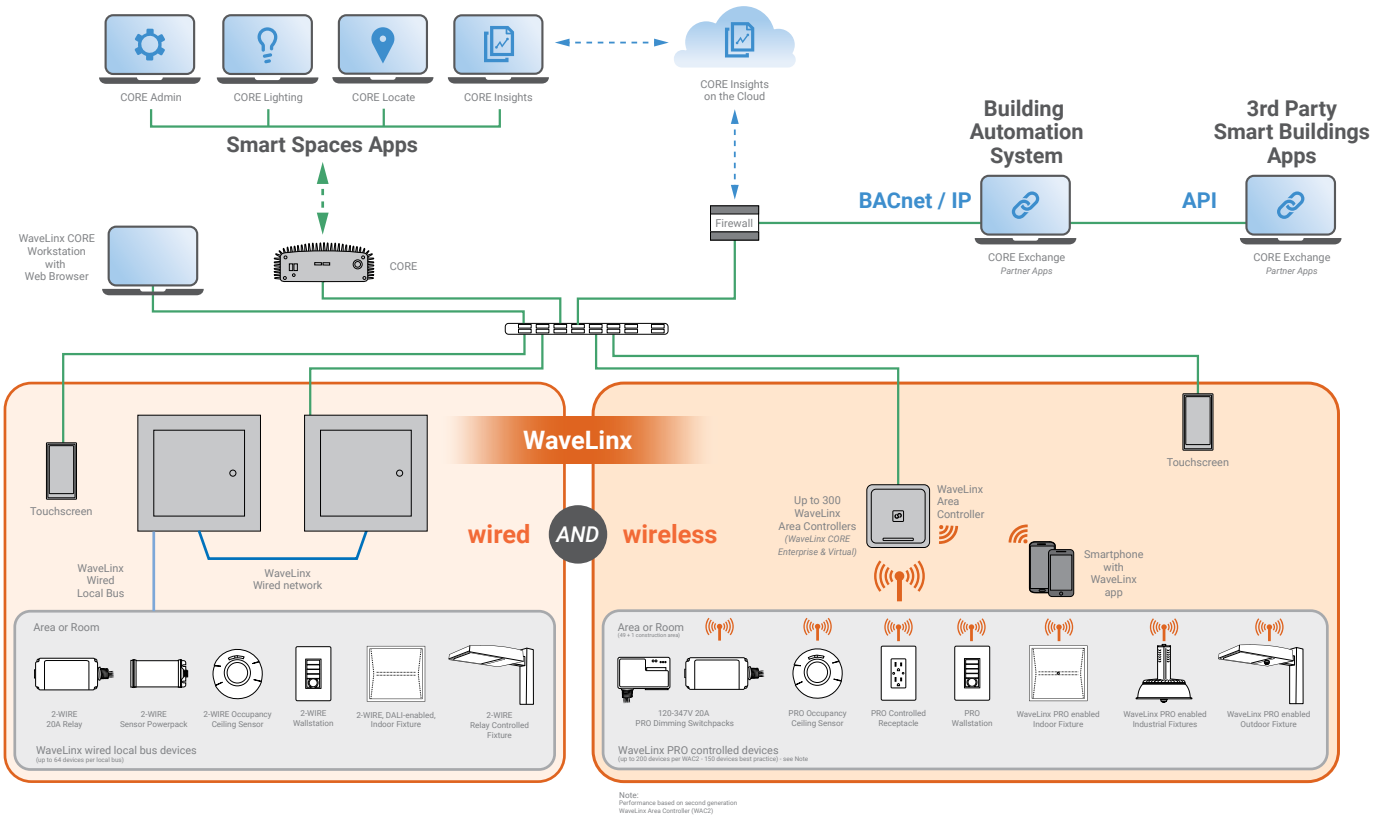
The **WaveLinx PRO wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

The **WaveLinx wired system** controls the devices using relay, 0-10V, DMX and the WaveLinx wired digital local bus. The WaveLinx wired system connects to the building LAN using the EG2 module. Each WaveLinx wired area controller communicates on the WaveLinx wired network.

WaveLinx Area Controllers (WAC) and WaveLinx Ethernet Gateways (EG2) communicate with WaveLinx CORE over the Ethernet network.

Please refer to the WaveLinx PRO Wireless Network and IT Guidance Technical Guide and WaveLinx Wired Network and IT Guidance Technical Guide for more information.

View WaveLinx Network and IT Guidance Technical Guide



Control Systems

- WaveLinx
- WaveLinx wired
- VividTune