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

WaveLinx Wired

FRS-DA

Field Relay

Typical Applications

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

Interactive Menu

Product Certification

Product Features

WaveLinx Wired Local Bus

Receptacle Control

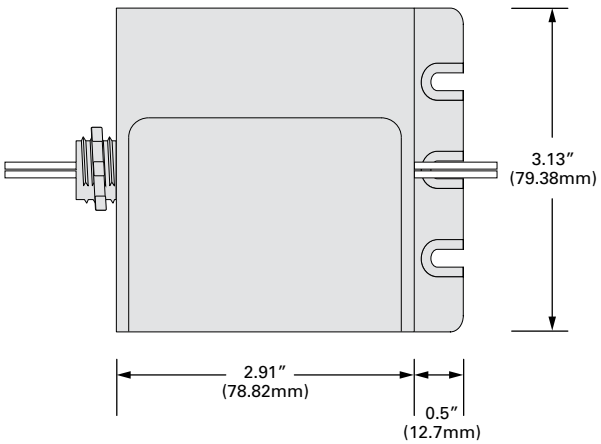
Outdoor Control

Top Product Features

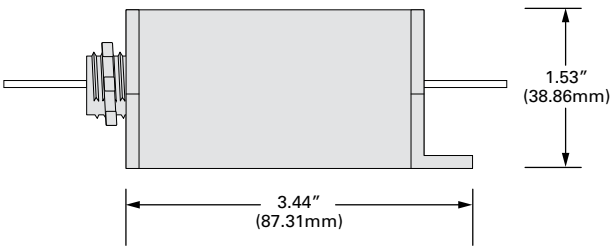
- Provides ON/OFF control of lighting and/or receptacles
- Universal Voltage Input (120V - 347V)
- Rated for lighting and receptacle loads
- UL924 Listed
- Options to meet Buy American and other domestic preference requirements

Dimensional Details

Top View



Side View



additional product diagrams

Order Information

The Field Relay is an accessory to the WaveLinx Wired system and connects to the WaveLinx Wired local bus via the SCMD4 control module.

Catalog Number

Domestic Preferences (1)	Catalog Number	Description	Input Voltage	Current
[Blank] =Standard **BAA** = Buy American Act	**FRS-DA**	Single pole, single throw, 20A latching relay	120/277/347V	20A

Notes

(1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Product Specifications

Key Features

- Connects to the WaveLinx Wired Local Bus for On/Off control of lighting loads or receptacles
- Universal Voltage Input (120V - 347V)
- Designed with safety in mind, a loss of power on the WaveLinx Wired Local Bus will automatically set the relay to the closed (ON) position
- Rated for lighting and receptacle loads

Mechanical

Dimensions: 1.53”H x 3.13”W x 3.44”L (38.86mm x 79.40mm x 87.38mm)

Mounting:

- Fixture or junction box 1/2” knockout

Enivironment:

- **Temperature:** 32° F to 158° F (0°C to 70°C). For indoor use only.
- **Relative Humidity:** 10% to 90% (non-condensing).

Control Inputs: One set of terminals for iCANnet™ network
Suitable for Belden 1502 cable

Electrical

Relay Output:

- **Input Voltage:** 120-347 VAC +/- 10%
- **Maximum Load:** 20 Amps
- **Input Frequency:** 50/60 Hz

Control Specification:

- **Communication Interface:** WaveLinx Wired Local Bus (topology, polarity free)
- **Current Draw:** 3.75mA
- **Number of cycles before recharge:** 4
- **Charging time:** 20 seconds/cycle
- **Last state upon full depletion:** On

Note: The relay always maintains enough internal energy to allow users to turn the light on.

Wiring:

- **Relay:** 12 AWG stranded THHN non-polarized pair
- 18 AWG stranded PTFE plenum rated non-polarized pair

Note: The Field Relay is designed for low frequency switching applications, i.e. less than 4 cycles in 2 minutes

Standards/Ratings

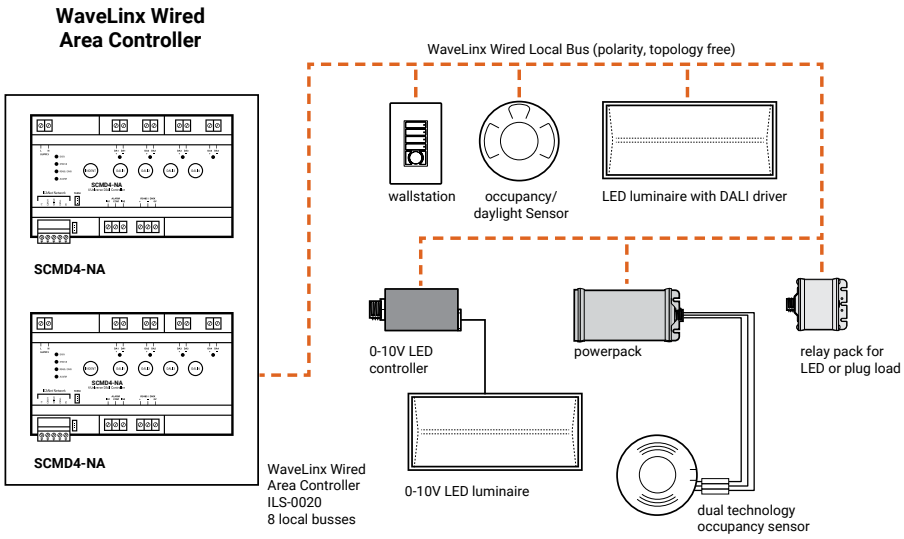
- cULus Listed - Energy Management Equipment (UL916)
- Manufactured in an ISO 9001 certified factory
- Meets ASHRAE Standard 90.1 requirements
- Meets IECC 2015 requirements
- Meets CEC Title 24 requirements

Warranty

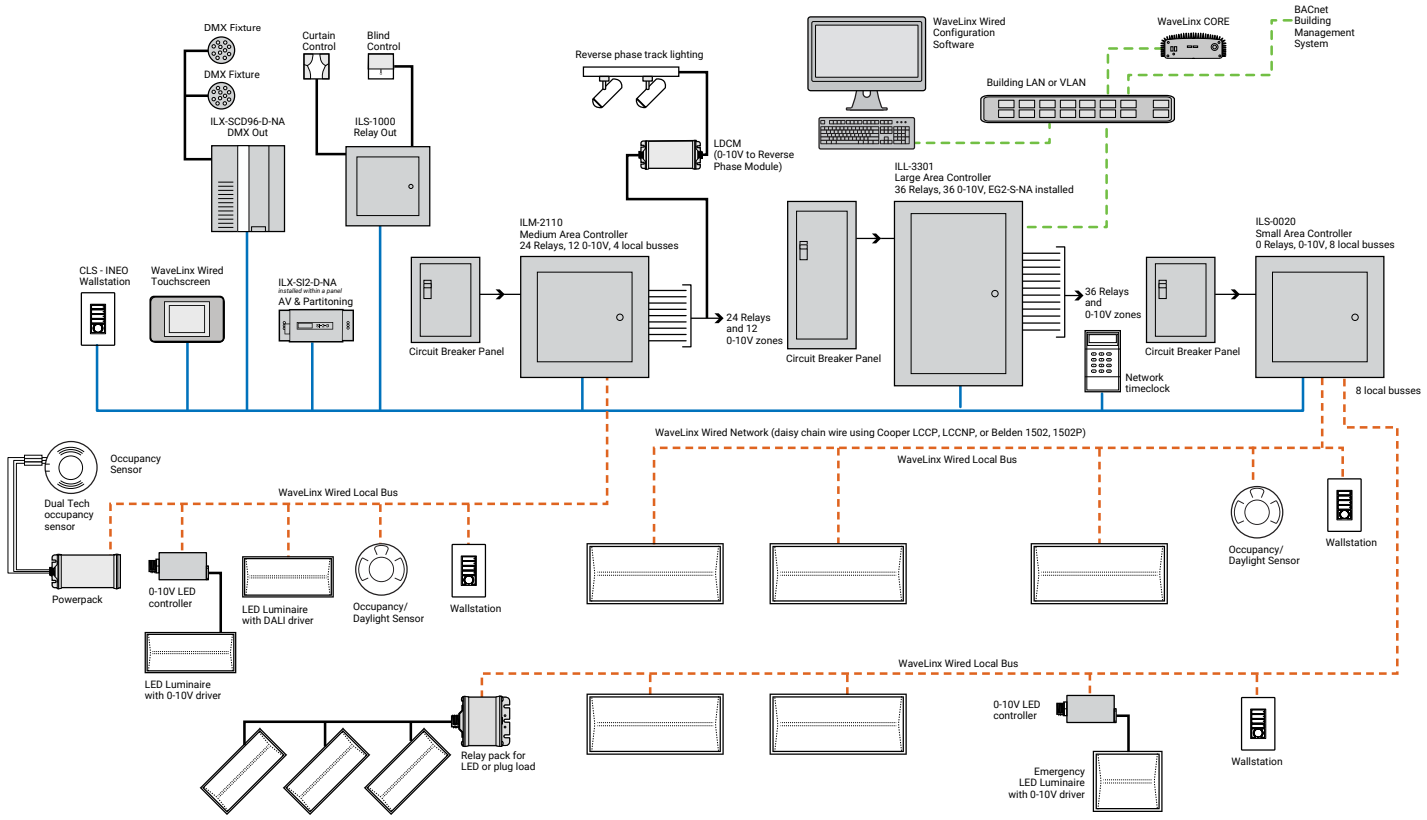
Five year warranty standard

System architecture

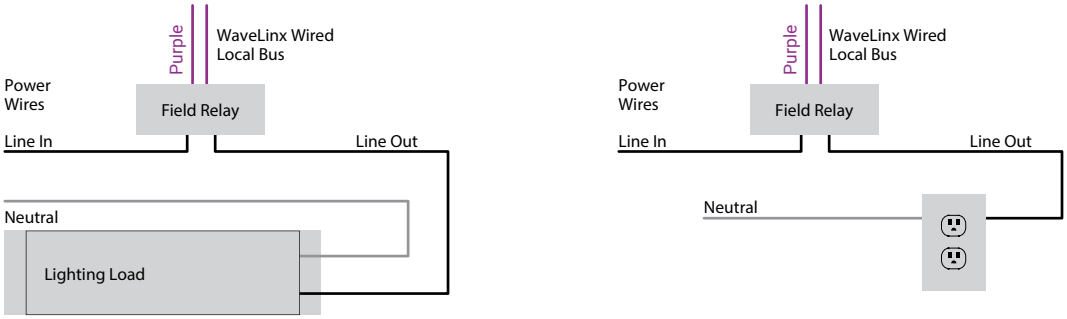
Simple WaveLinx Wired system



Complete WaveLinx Wired system



Wiring Diagram



Note: Install in accordance with all applicable National and local electrical and building codes.
Note: Specifications subject to change without notice.

Overview

Cooper Lighting Solutions Field Relay provides ON/OFF control and network connectivity in order to conserve energy and effectively manage the lighting system. The Field Relay uses advanced switching technology specifically designed to handle the large in-rush currents and inductive loads found in lighting applications.

Sample System Topology:

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

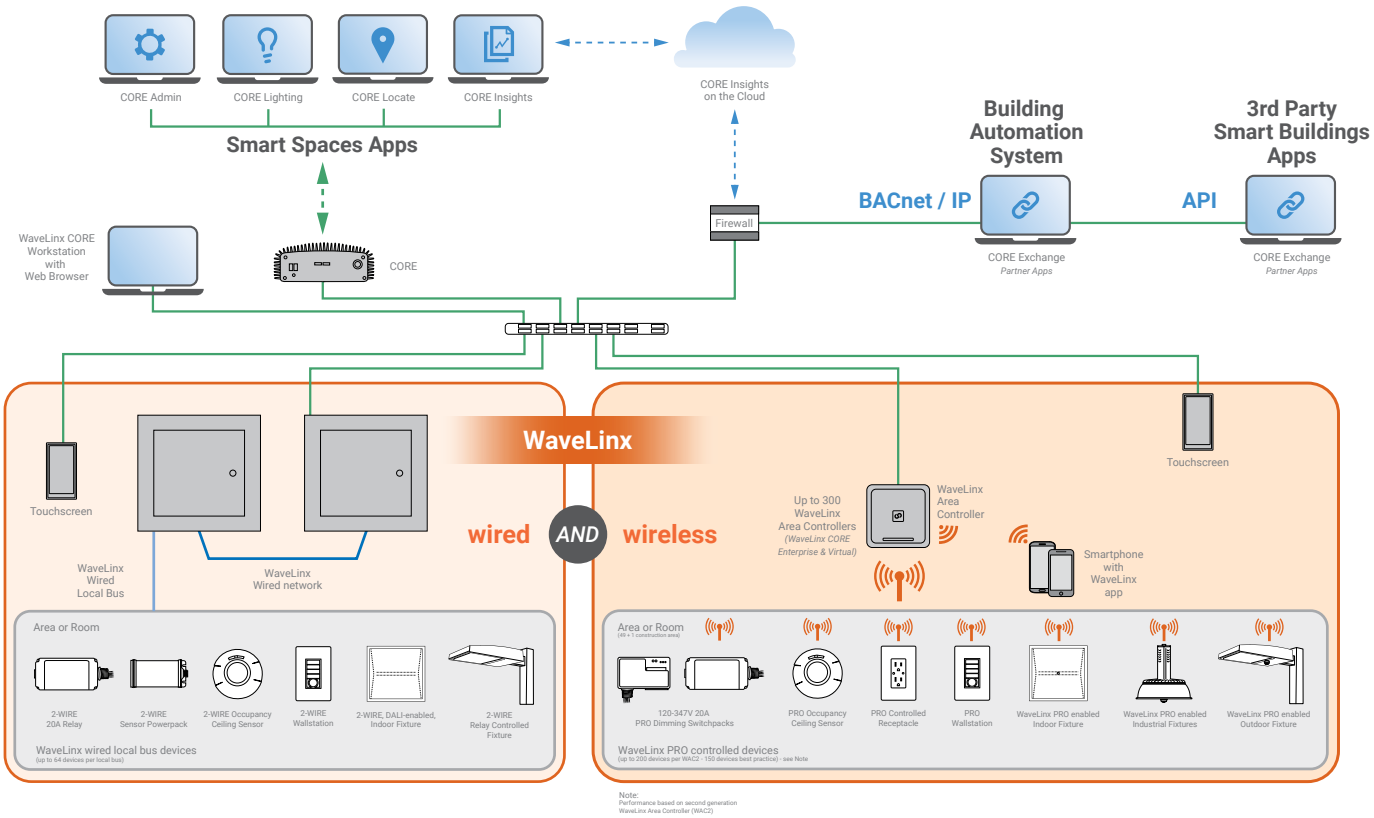
The **WaveLinx PRO wireless system** communicates using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

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

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com