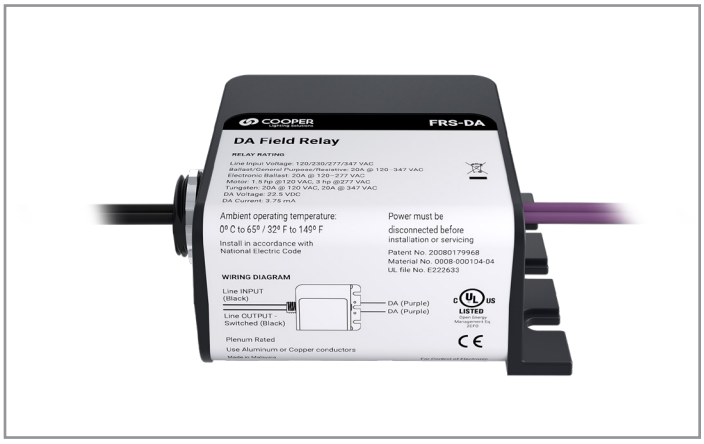
Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	



WaveLinx

DALI Field Relay (FRS-DA)

Provides ON/OFF control of lighting and/or receptacles

Typical Applications

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

Interactive Menu

Product Features

WaveLinx Mobile App

WaveLinx Wired Local Bus

Receptacle Control

Compatibility

WaveLinx DALI

WaveLinx Area Controller

Overview

Wavelinx DALI 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.

Product Features & Benefits

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

product diagrams

Order Information

The Field Relay is an accessory to the WaveLinx DALI system and connects to the WaveLinx DALI 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 DALI 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 DALI 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).

Electrical

Relay Output:

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

Control Specification:

- **Communication Interface:** WaveLinx DALI (2-wire, 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

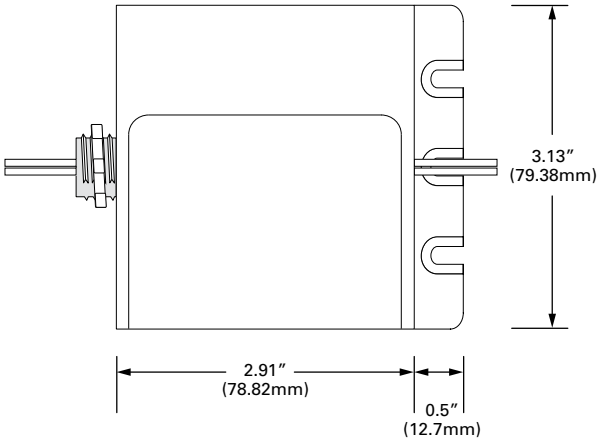
- cULus Listed - Energy Management Equipment (UL916)
- Manufactured in an ISO 9001 certified factory
- Meets ASHRAE Standard 90.1 requirements
- Meets IECC 2015 requirements
- Meets CEC Title 24 requirements

Warranty

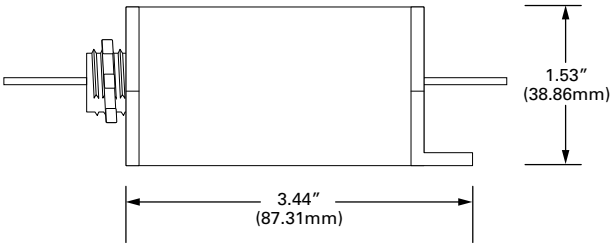
Five year warranty standard

Dimensional Details

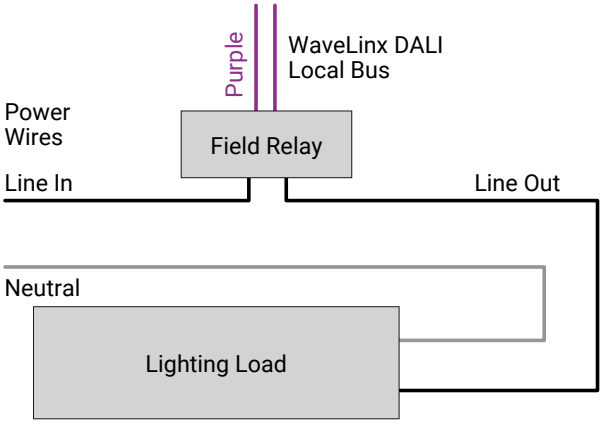
Top View

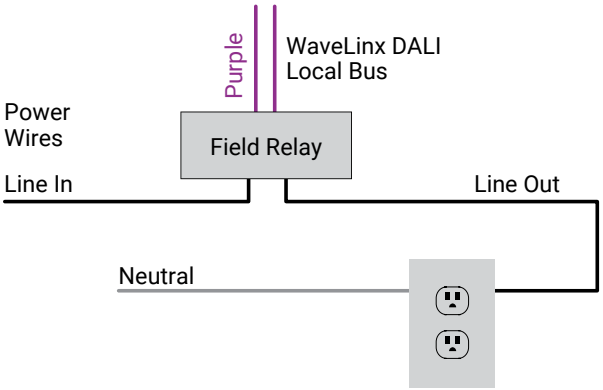


Side View



Wiring Diagram

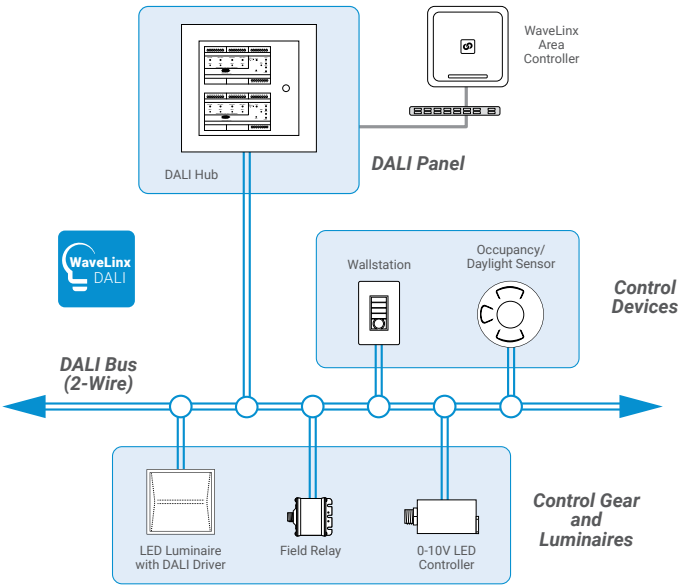




Note: Install in accordance with all applicable National and local electrical and building codes.
Note: Specifications subject to change without notice.

System Diagram:

This diagram shows the the main components and topology of the WaveLinx system with DALI devices. The WaveLinx DALI devices use DALI-2 wires for device to device communications while connected to a WaveLinx Area Controller. The WaveLinx DALI enables DALI certified luminaries/drivers and peripherals to function with other WaveLinx devices.



System Diagram:

This diagram shows the main components of the WaveLinx connected lighting system with WaveLinx DALI, CAT and PRO devices.

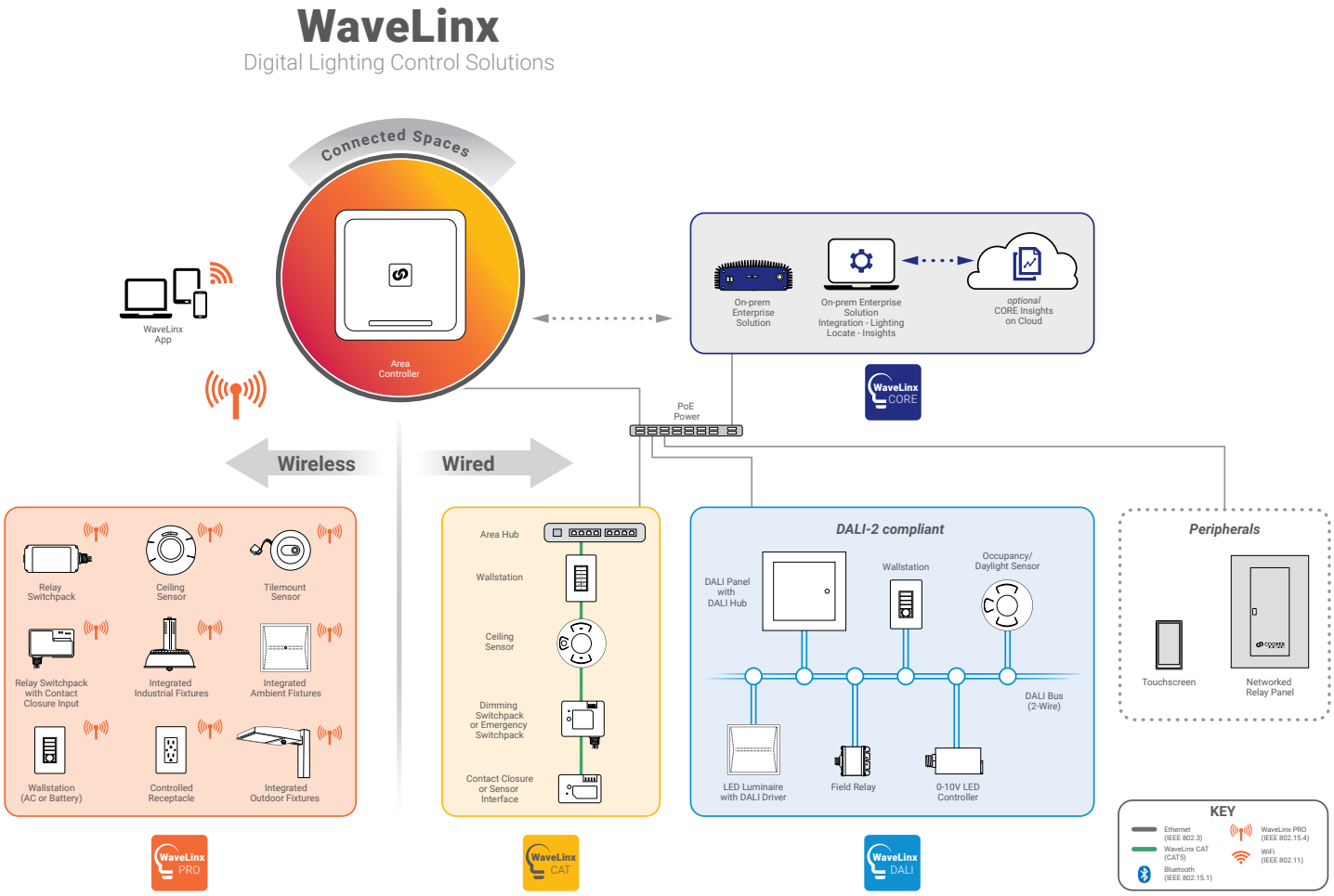
The PRO devices communicate using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

The CAT devices communicate over the category 5 based communication bus and control the light fixtures using a relay (on/off) and 0-10V output (dim/raise).

WaveLinx DALI devices communicate via a DALI bus (2 wires), which connects various components including DALI fixtures, a DALI DAC (DALI to 0-10V converter), DALI field relays, DALI wallstations, and DALI occupancy sensors.

WaveLinx Area Controllers (WAC) communicate with WaveLinx CORE Apps over the Ethernet network.

View WaveLinx Network and IT Guidance Technical Guide



Control Systems

- WaveLinx

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