Project	Catalog #	Туре	
Prepared by	Notes	Date	



# WaveLinx Pro Low-Voltage

# **1200W Power Module**

Blends the benefits of low-voltage wiring with wireless control for speed and flexibility

Typical Applications

 $\mathsf{Office} \boldsymbol{\cdot} \mathsf{Education} \boldsymbol{\cdot} \mathsf{Healthcare} \boldsymbol{\cdot} \mathsf{Hospitality} \boldsymbol{\cdot} \mathsf{Retail}$ 

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- Product Certification & Awards Meets latest ASHRAE Standard 90.1 requirements
  - Meets latest IECC requirements
  - Meets latest CEC Title 24 requirements

## **Top Product Features**

- · Ethernet connection to Wireless Area Controller (WAC2) for system control
- Available in a 1200W configuration covering up to 2400 sq-ft (223 square meters)
- · Integrated Class 1 wiring compartments for normal and emergency circuit wiring for centralized UL924 input
- Two (2) low-voltage output circuits for emergency output (emergency lighting)
- · ALERT input to enable security / fire protection integration for all connected low-voltage luminaires
- Daisy-chain wiring (up to 90W per output) with individually addressable low-voltage luminaires
- · Plenum rated and passively cooled for plenum installations
- Energy calculations of connected low-voltage luminaires available through Trellix
- Each power module supports up to 36 low-voltage luminaires

## **Dimensional Details**







# WaveLinx Pro Low-Voltage

## **Order Information**

The WaveLinx Pro 1200W Low-Voltage Power Module is a central feature of the WaveLinx Pro Low-Voltage offering. The WaveLinx Pro Low-Voltage Power Module supports the full functionality of the WaveLinx Pro connected lighting system via an Ethernet connection to a Wireless Area Controller (WAC2) allowing low-voltage wired and wireless devices to operate harmoniously as part of a single control system.

Catalog Number	
Catalog Number	Description
LVPM-12-100-64-2E	WaveLinx Pro 1200W Low-Voltage Power Module

#### **Required Accessories**

All WaveLinx Pro connected lighting (WCL) system accessories require at least one WaveLinx Pro Wireless Area Controller (WAC2) for communications. Ensure the bill of material includes one of the following components.

#### Catalog Number

Catalog Number	Description
WAC2-POE	Wireless Area Controller G2, PoE powered
WAC2-120	Wireless Area Controller G2 with 120VAC to PoE Injector

#### **Optional Accessories**

For connection to 120VAC outlets.

#### **Catalog Number**

Catalog Number				Descriptio	n		
WP0E2-120	120VAC to PoE Injector						

## **Product Specifications**

#### **Key Features**

- · Blends the benefits of Class 2 low-voltage wiring with wireless controls
- · Supports 36 addressable low-voltage luminaires
- Provides Ethernet connectivity to a WaveLinx Pro Wireless Area Controller
- Supports both normal and emergency power inputs with two (2) EM outputs
- ALERT dry contact closure input drives all connected low-voltage luminaires immediately to 100%
- Commissioning through WaveLinx Pro mobile application
- Passively cooled and plenum rated design for above ceiling installation
- Energy calculations of connected low-voltage luminaires available through Trellix

#### Mechanical

**Size:** 24.3" x 11.6" x 6.1" (617mm x 294mm x 156mm) **Weight:** 22 lbs (10 kg)

### Environment:

- Operating temperature: 32°F to 104°F (0°C to 40°C)
- Storage temperature: -40°F to 176°F (-40°C to 80°C)
- · Relative humidity operating: 0-90% (non-condensing)
- For indoor use only

Mounting: indoor plenum rated locations

```
Color: Grey
```

Housing: Painted steel

### Electrical

Input Requirements:

- Input Voltage: 120-277VAC +/- 10%
- Input Frequency: 50/60Hz

### MAX Current Input (Amps)

	Norma Inj	l Power out	EM P Inj	ower out	Single Panel Input Only			
Model	120VAC	277VAC	120VAC	277VAC	120VAC	277VAC		
LVPM-12-100-64-2E	9.0	4.0	1.8	0.8	10.8	4.8		

Power supply output: Twelve (12) Class 2 outputs (90W MAX per output)

## Hardware Specifications

Peripheral Connectivity: Connects to WaveLinx Pro Wireless Area Controller (WAC2) through wired network switch

## Status Indicators:

- Status
- Dlagnostics
- EthernetAlert mode
- Alert mode
   (10) Lawy Value

**Software Specifications** 

(12) Low-Voltage circuit status

## Programming: WaveLinx Pro programming performed through mobile application

Compatibility Compatible with WaveLinx Pro version 7.0.1 ONLY

### System Performance

#### Number of Devices:

- 36 low-voltage luminaires per Low-Voltage Power Module
- 200 wireless or low-voltage luminaires per Wireless Area Controller (best practice 150 devices)

#### Low-Voltage Lighting Cable Distance (per output):

- Maximum: 328ft (100m)
- Best practice: up to 100ft (33m)

#### Standards/Ratings

- cUL LIsted for Low-Voltage Lighting Systems
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

Product Safety:
 UL 2108

### Awards

• IES Progress Report recognition for 2021

Warrantv

Five year warranty standard



# WaveLinx Pro Low-Voltage

## **System Architecture**

This diagram shows the main components of the WaveLinx Pro connected lighting (WCL) system. The WCL system communicates using wireless mesh technology based on the 802.15.4 standard. A PoE LAN connection for each Wireless Area Controller (WAC2) is required for power and data access to the building wireless network. System setup is achieved through a simple mobile application via wireless communication to the system.



## **Overview**

The WaveLinx Pro 1200W Low-Voltage Power Module is an integral part of the WaveLinx Pro connected lighting system. Utilizing Cooper Lighting Solutions Low-Voltage light fixtures, WaveLinx Pro Low-Voltage offers the full functionality of WaveLinx Pro blending both class 2 wiring and wireless control.

The WaveLinx Pro 1200W Low-Voltage Power Module connects to 120-277VAC 50/60Hz and offers both normal and emergency functionality from centralized UL924 sources. With twelve (12) outputs of up to 100W each, the WaveLinx Pro 1200W Low-Voltage Power Module is an integral part of the WaveLinx Pro connected lighting system. Utilizing Cooper Lighting Solutions low-voltage luminaires, WaveLinx Pro Low-Voltage offers the full functionality of WaveLinx Pro blending the benefits of class 2 wiring with wireless control for a seamless integrated smart lighting control solution.

Similar to the Distributed Low-Voltage Power (DLVP) system, WaveLinx Pro Low-Voltage offers two (2) emergency lighting strategies. Low-voltage luminaires (common to both systems) may be ordered with low-voltage emergency battery packs or WaveLinx Pro Low-Voltage Power Modules may utilize both normal and UL924 emergency power sources (120-277VAC 50/60Hz).

WaveLinx Pro Low-Voltage Power Modules also enable security and fire protection capabilities via a dry-contact ALERT input. When this contact is closed, all low-voltage luminaires connected to that power module override their current state and proceed to FULL output for the duration of the contact closure event.

#### Notes

- If centralized emergency power source is not utilized, normal and emergency inputs may be wired together for normal only operation. In this case, emergency lighting would require a low-voltage emergency battery pack per luminaire or other emergency lighting must be provided.
- When employing a centralized UL924 strategy, interruption of normal power results in low-voltage luminaires connected to outputs 1 & 2 at 100% while luminaires on other outputs are OFF. During normal operation, outputs 1 and 2 are fully controllable as with any other output.
- A WaveLinx Pro Low-Voltage Power Module must have an Ethernet connection with a Wireless Area Controller (WAC2) and be commissioned via the WaveLinx Pro Mobile Application for functionality. A power module's connected low-voltage luminaires may be a part of any area or zone on a WAC2, but not shared with multiple WACs.
- WaveLinx Pro low-voltage luminaires are available with or without integrated sensors in popular Cooper Lighting Solutions brands and are supported by both WaveLinx Pro
  Low-Voltage and the DLVP system. When used with WaveLinx Pro Low-Voltage, energy usage information about low-voltage luminaires is available through Trellix, however,
  low-voltage luminaires are not currently compatible with Trellix Locate.



Network

**Stand Alone** 



Note: Daisy-chain low-voltage lighting loads up to 90W per output

Note: When normal power is de-energized and emergency panel is energized, lighting on low-voltage output circuit #1 and #2 go to 100% while other low-voltage output circuits are OFF / de-energized.



# **WaveLinx Pro Low-Voltage**

## Low-Voltage Circuit Efficiency



Output Power (Watt)

## Better Data. Better Decisions.

Trellix combined with our WaveLinx Pro connected lighting system is a distributed network of LED lighting fixtures with integrated sensing and beacon technology that captures real-time data; making your facility smarter so you can make smarter decisions.

Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems in a commercial building to deliver actionable insights through the aggregation of valuable data.







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Specifications and dimensions subject to change without notice.