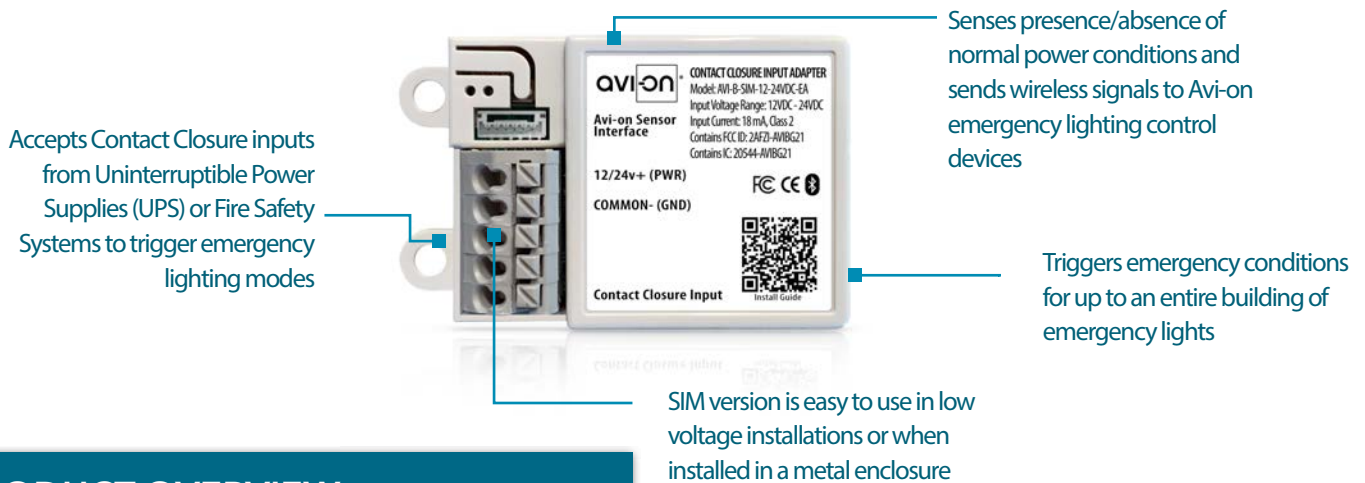


UL 924 Normal Power Beacon

Low Cost Compliance with UL 924 2022 Emergency Lighting Requirements



PRODUCT OVERVIEW

Description:

The Avi-on® UL 924 SIM normal power beacon provides a simple and cost-effective means of detecting the presence or absence of normal power to trigger emergency lighting modes. The sensor is fully approved and compliant with the 2022 UL 924 revisions. Only a single detector is needed per transfer switch. The sensor sends a wireless signal to an emergency control device wired with an emergency-enabled Avi-on XFAC (all versions) to trigger the required controls override when there is a loss of normal power. When used with the Avi-on XFAC in zone-based or individual fixture control applications, the addition of shunt relays can be completely avoided.

The contact closure input can also be connected directly to the emergency trigger output of UPS power sources, building fire and safety systems, or other contact input sources.

The UL 924 Beacon kit is comprised of an AVI-B-SIM-12-24VDC-EA with a special UL 924 Normal Power Beacon firmware and two AVI-PS-277-12-250 power supplies: one to power the SIM detector and one to provide the normal power sensing input from an AC line.

Installation:

Install the Beacon in a location downstream of a UL 1008 emergency/normal power transfer switch (that includes test modes) in a convenient location to connect to both emergency and normal power sources. Connect the SIM power using the included power supply to the EMERGENCY power line. Connect the contact input to the NORMAL power AC line using the included power transformer or directly to a contact closure emergency trigger source. The contact input does not have its power source. If the contact trigger does not have one, use the included power supply to introduce 12vDC to the contact circuit from the EMERGENCY power line. Install the included antenna through a 1/4" hole in the junction box. Program using Avi-on Pro or Mobile Commissioning applications.

Applications:

A single Normal Power Sensor can control all the emergency circuits in a network of any size. Use a Normal Power Sensor for each transfer switch if there are multiple transfer switches in the building.

ORDERING INFORMATION

Part Number	Description	Application	Color
AVI-KIT-SEN-SIM-UL924-OA	AVI-B-SIM-12-24VDC-EA + 2 AVI-PS-277-12-250 + 6211ANT + UL924 Host NWK Settings	Normal Power Beacon/Emergency Light Trigger	White

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or prosales@avi-on.com for information on becoming an Avi-on partner and order details.

Project		Location/Type	
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SPECIFICATIONS

Normal Power Sense: 12-24V or Standard Contact Closure (closed for normal power state, configurable to normally open)

Power Consumption: 17mA

Voltage Input: 12-24VDC

Dimensions: All components fit in a 4x4 single depth IP rated junction box

Color: White

Weight: .45 oz (16g) -All components

Operating Temp: -22F to +158F (-30C to +70C)*

Storage Temperature: -40F to +185F (-40C to +85C)

Humidity Rating: 95% non-condensing

Programming: Via Avi-on platform. Mobile, laptop, remote, local.

Maximum groups/nodes: Unlimited

Certifications: FCC ID: 2AFZI-AVIBG21
IC ID: 20544-AVIBG21
BQB:
DID: D059595
Qualified Design ID (QDID):
205509
178212
175341
UL: 924,916

* Note: Operating controller at or above these levels may result in damage components/product

WIRING DIAGRAMS

Normal Power Sensor Wiring Diagram
Transfer Switch

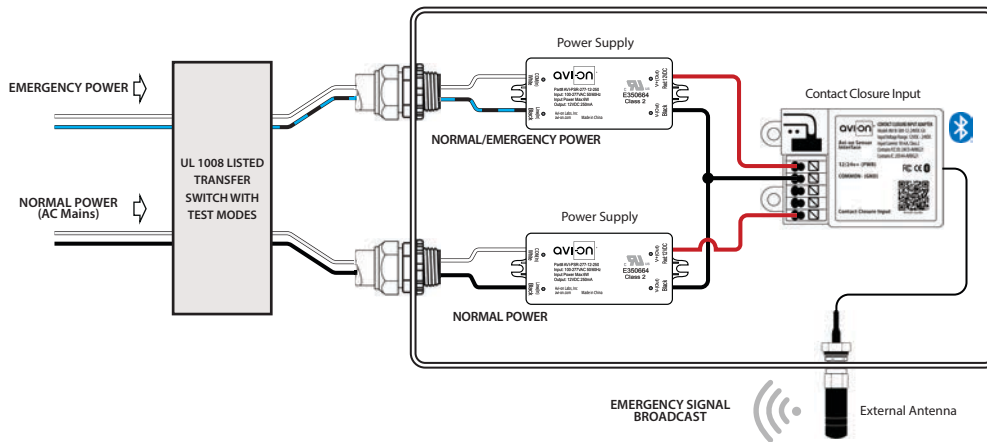


Figure 1. Typical Wiring with Transfer Switch

WIRING DIAGRAMS

Normal Power Sensor Wiring Diagram Uninterruptible Power Supply (UPS)

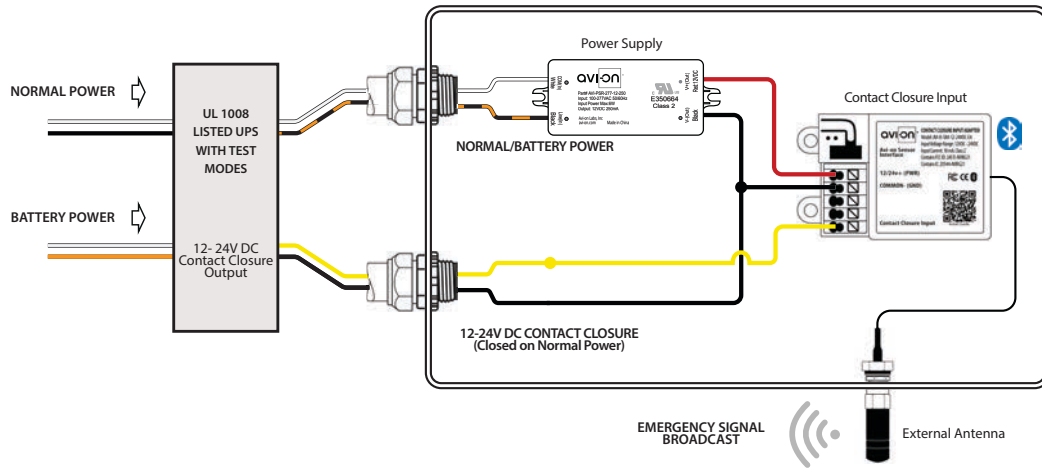


Figure 2. Typical Wiring with Always On Uninterruptible Power Supply (UPS)

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