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Radiar ZD-LR

Long Range DALI Zhaga Controller for Single Driver

Product Overview

Radiar ZD-LR is a compact, long-range BLE 5.2 wireless DALI controller powered by 12–24 VDC. Designed in a Zhaga Book 18 form factor, it features a single DALI output channel for controlling one LED driver and supports wireless communication up to 140 m in line-of-sight (LoS) conditions. Its IP65-rated, plug-and-play design makes it suitable for UFO high-bay fixtures, shoebox fixtures, wall packs, and streetlights.

The Lumos Controls ecosystem comprises controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards It is listed by the Design Lights Consortium (DLC), qualifying it for energy conservation incentive programs and rebates by utility companies.

Features

- BLE 5.2 wireless communication with a range of up to 140 m LoS
- 12-24VDC powered
- DALI output for controlling the LED driver
- Compact sized for easy installation
- IP65 rated for outdoor applications
- Supports Over-the-Air (OTA) firmware updates

Specifications

Electrical

Specifications	Value
Input voltage	12-24VDC
Max. Input current	30mA

Bluetooth

Specifications	Value
Operation frequency	2.4-2.483GHz
Transmission power	15dBm
Range	up to 140m(459.32ft) clear LoS

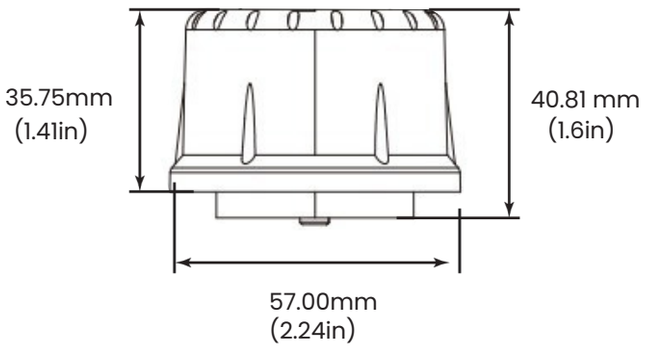
Environmental

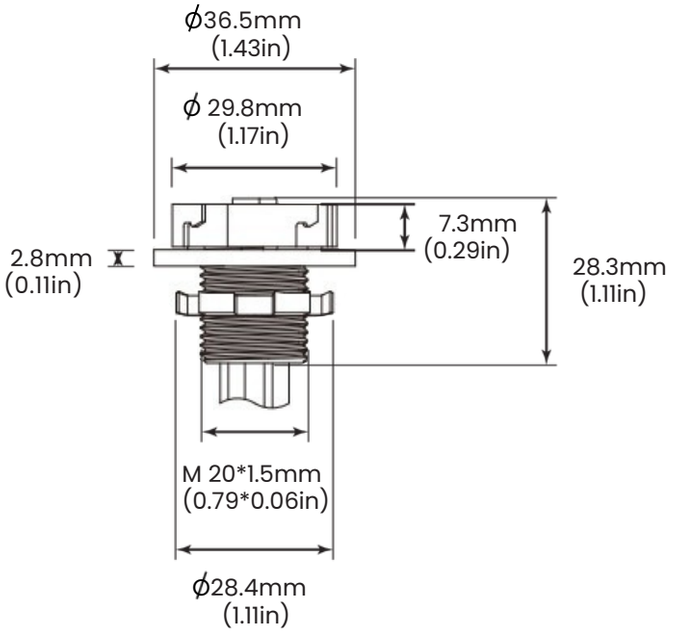
Specifications	Value
Working temperature	-20 to 60°C(-4 to 140°F)
IP rating	IP65

Dimming

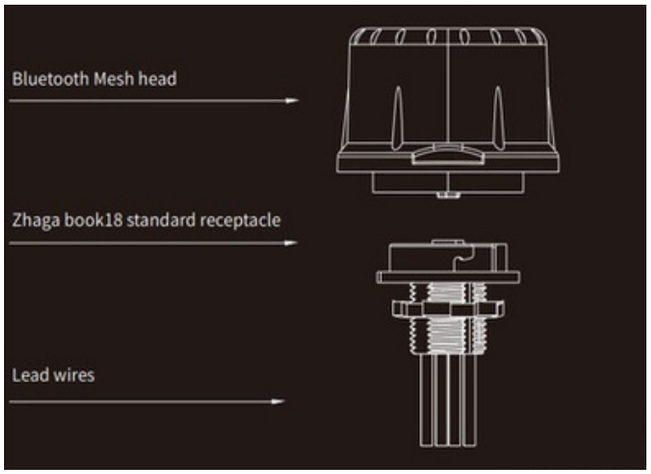
Specifications	Value
Output channel	DALI/30mA, 0-100% range

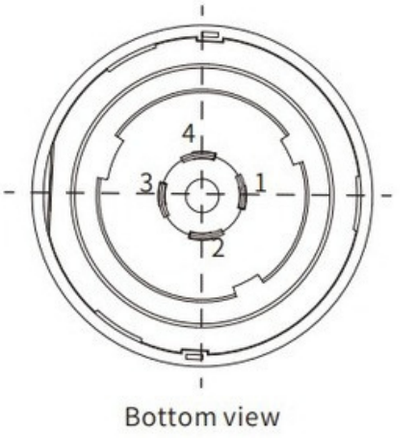
Product Dimension

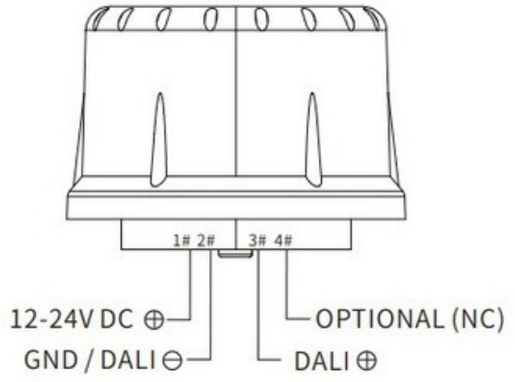




Wire Description





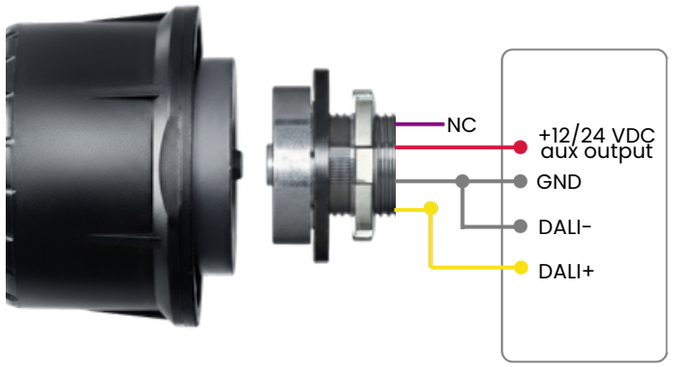


Pin	Description	Lead wire color
1	12-24VDC input	Red
2	GND/DALI-	Gray
3	DALI+	Yellow
4	No connection	Purple

Wiring Diagram

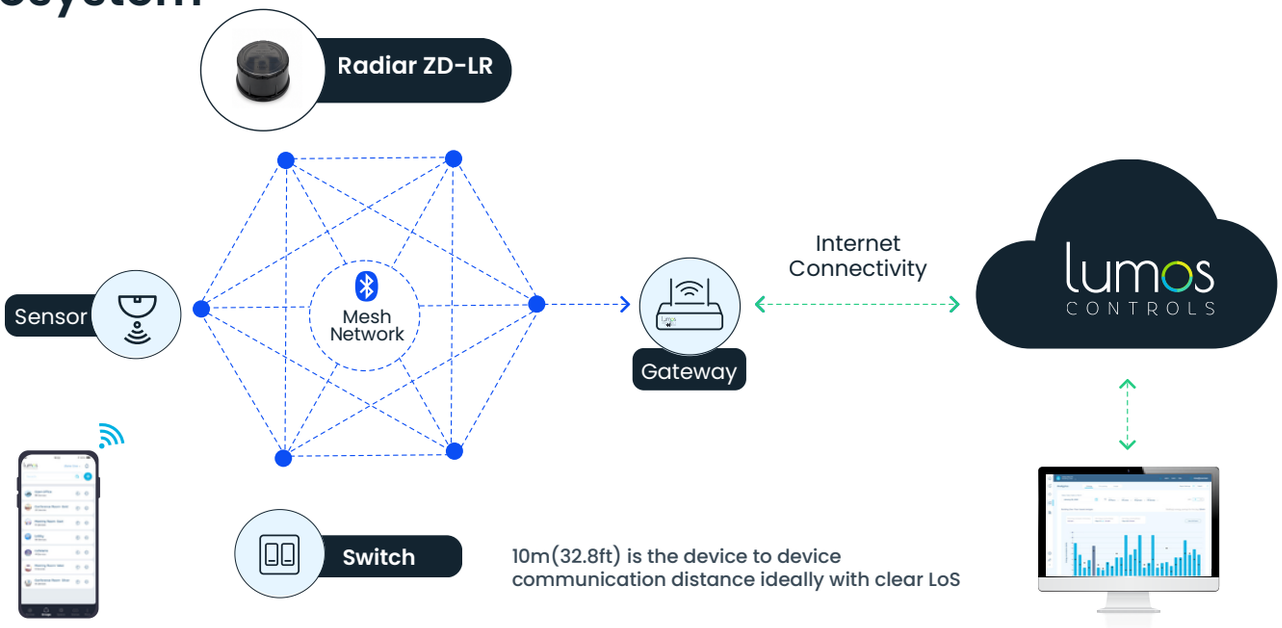
Device can be powered using the 12-24VDC auxiliary output from the DALI D4i drivers or via other external 12-24VDC supply. DALI output channel is connected to the driver for dimming.

Note: The Long Range Zhaga DALI controller includes a built-in DALI bus power supply. Ensure that the connected DALI driver does not supply DALI bus power.



DALI Driver

Smart Ecosystem



Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating
WCDDZ18-LR	Radiar ZD-LR	Long Range DALI Zhaga Controller for Single Driver	BLE5.2	12-24VDC

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