Daintree® Wireless Controls

WIZ20 Integrated Sensor

Project Name _____

Date _____ Type _____

Catalog Number _____

Description

Introducing Current's new integral lighting control sensor to the Daintree® Wireless Controls platform. These sensors come factory installed in many of Current's LED fixtures. These new occupancy and photocell sensors simplify the installation process, improve ceiling scape aesthetics by eliminating the need to install additional devices in the ceiling and economically deliver lighting control to any environment.

The Daintree® **Wireless Integrated Sensor (WIZ20)** is a small-size, luminaire-integrated sensor with wireless communication based on the 802.15.4 standard which provides secure and reliable communication between the luminaires in the room. Using the WIZ20 sensor in each luminaire provides state-of-the-art code compliant distributed lighting control based on the built-in motion sensing and continuous dimming for daylight harvesting function.

When deployed in an EZ Connect application the sensor is designed for persistent lighting control as stand-alone in case of a wireless network communication failure.

Product Overview

The sensor is shipped pre-installed in Current LED fixtures.

The sensor can be personalized to Daintree® EZ Connect zonal based control. The Daintree® EZ Connect commissioning app is available as a free download on the Apple® App Store. The sensor can be zoned with up to 50 devices. Once the sensors and lighting are commissioned with the app, the sensed information is then shared between all the luminaires mapped in the zone.

WIZ20 sensor can be also be upgraded to the full-featured Daintree® Networked. Daintree® Networked allows full building or multi-site control, monitoring and reporting with Daintree® Controls Software. The sensor communicates wirelessly with the WAC60 wireless area controller which results in a secure and reliable connection and helps minimize the installation costs and complexity.

The control of the luminaire is carried out through the digital bus between the output of the sensor and the control input of the luminaire's LED driver. The digital bus also provides the necessary supply power for the sensor. No additional wiring or auxiliary power supply are required which helps to minimize installation costs. When commissioned in a zone it is also possible to adjust preferred dimming levels manually through self-powered wireless switches (ZBT-S1AWH) or battery-operated dimmers and scene switches (WWD2).

Additionally, the WIZ20 sensor can provide Daintree® Controls functionality to any 0-10V fixture by connecting the two devices together with an LCA accessory kit.

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Key Features and Benefits

- Works as a Zonal fixture control when upgraded to Daintree EZ Connect, or full-building or multi-site control in full-featured Daintree Networked Wireless Controls Systems
- Provides Occupancy Sensing and Daylight Harvesting in one sensor
- Device performance can be customized with the Daintree EZ Connect app available for download on the Apple® App Store
- Capable of full building control, scheduling, and real-time data analytics when using Daintree Controls Software on a fully-featured Daintree Networked system
- Provides flexible scheduling with the Daintree Controls Software
- Sensors are integrated into many Lumination® LED Luminaires or can be installed in any 0-10V lighting fixture with LCA kit

Product Specifications

Sensor Type	Occupancy, photosensor
Dimensions	1.25 x 1.25 x 1.45 in. (32 mm x 32 mm x 37 mm)
Weight	14.5 grams
Voltage	9.5-22.5VDC, Class 2 supply source capable of no greater than 15VA power
Current Consumption	30mA
Operating Ambient Temperature Range	0-60°C (indoor)
Plenum Rating	Suitable for plenum use
Status Indicator	LED pattern indicates network join status
Connections	See connection diagram on the next page
Mounting Hole	Installs within a 22mm (0.87") hole
Recommended Mounting Height	9-11 ft
Coverage Pattern Ratio	**1:1.20 at 10 ft. mounting height: coverage radius**
Warranty	5 years

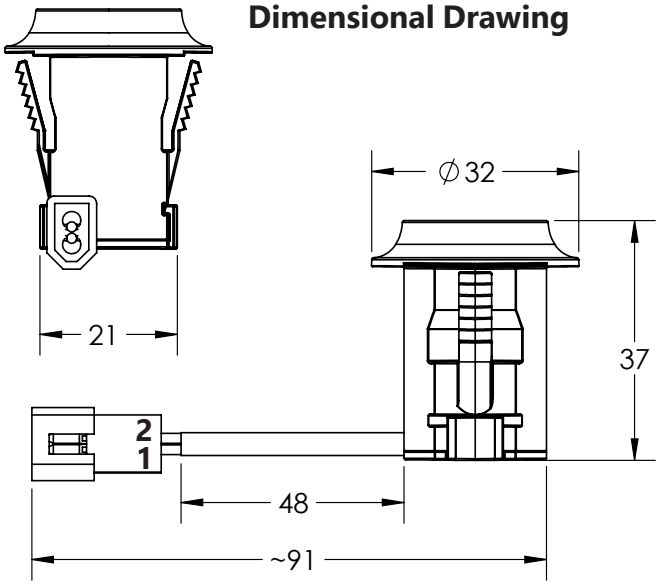
Note: Connect WIZ20 to Current LED drivers or control modules not capable of providing greater than 15VA power, including but not limited to models listed in the Power Supply Compatibility List (see page 3)

Additional Information

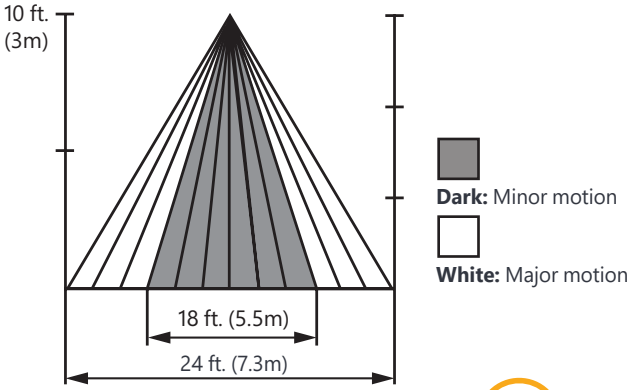
Purpose of the Control	Operating Control
Construction of Control	Independently Mounted
Type of Action	Type 1
Pollution Degree	PD2
Function/Software Class and Structure	Class A
Rated Impulse Voltage	330V

Note: Any external cables connected to devices not to exceed 3 meters length. Product is not to be installed in any enclosure, cavity, junction box, etc. which also houses line voltage or non-SELV wiring.

Dimensional Drawing



Coverage Pattern



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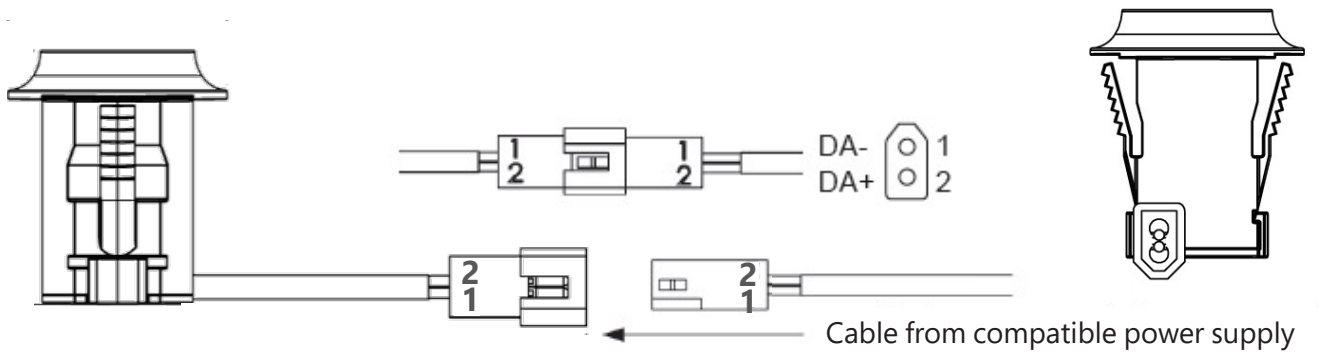
Power Supply Compatibility List

Manufacturer	Manufacturer P/N	Input Voltage (VAC)	Output Voltage (VDC)	WIZ20
Current	**GED22MCRP500**	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible
Current	**GED90MCRP1750**	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible
Current	**GEMOD/DB010**	120 – 277 VAC	DA OUTPUT/16 VDC	Compatible

Wiring Diagram

Connect the WIZ20 Sensor to a compatible power supply using the provided connector.
While the sensor is designed to withstand Electrostatic Discharge (ESD), it is always advisable to touch a grounded metal object before handling the sensor, particularly in an operating fixture.



Color	Style	Description
Green	Single Flash	Occupancy Detected. This feature can be optionally disabled if not desired.
Green/Red	Solid On	Device is initializing. Occurs for a short period after power has been applied during boot up.
Green/Red	Flashing	Device is "identifying" itself in response to a network command to do so.
Red	Rapid Flashing	Searching for a network. Also used when receiving firmware updates from the **Daintree**® EZ Connect app.
Red	Slow Flashing	Has joined a network but was not commissioned. Add the device to a zone to resolve.
Red	Solid On	An error condition was detected. Power cycling or resetting the device is recommended.

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Warranty

Current offers a limited Warranty across its Daintree Portfolio. The table below summarizes the Warranty terms. For additional information, please review the Limited Warranty Document on the Daintree Homepage.

Component	Warranty Period	Coverage Details
Daintree Software	1 year (IoT Cloud installed Software) Subscription term (SaaS) 3 years	Current warrants that as long as all applicable fees due are paid, Daintree Software will substantially conform to the applicable published documentation and published specifications for the Warranty Period.
System Controller	3 years	100% parts coverage. Warranty for non-Daintree software (such as operating system software) is provided by the respective software; Current makes no warranty with respect to non-Daintree software.
WACs	5 years	100% parts coverage
Wireless Adapters	5 years	100% parts coverage
Wireless Devices	5 years	100% parts coverage, excluding batteries.
Wireless Thermostats	2 years	100% parts coverage

Daintree wireless controls are available integrated and preinstalled in many Current lighting fixtures. Any 0-10V lighting fixture can be enabled with Daintree controls with a Daintree LCA Kit.

For a complete list of integrated sensors, look for the Daintree Wireless Controls icon on the product pages on **gecurrent.com.**

WIZ20 Integrated in-fixture sensor provides occupancy sensing and daylighting. Current fixtures can be ordered with "TT" catalog logic for Daintree EZ Connect, or "NA" for Daintree Networked programming functionality.

Ordering Information

SKU	Product Description	Model Number
95051649	Daintree Wireless Integrated Sensor	WIZ20

Product Certifications

c UL us
LISTED
Sensing Control
E486320

Contains
FCC ID: 2AS3F-A1028250
IC: 25008-A1028250

DLC LISTED

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Name	Description	Minimum Value	Maximum Value	Default Profile Value
Dimming				
Task Level	The output power level in Task state – in percentage of the full power.	0%	100%	100%
Background Level	The output power level in Background state – in percentage of the full power.	0%	100%	50%
Partial Off/Stand-by	The output power level in Standby state – in percentage of the full power.	0%	100%	0%
Occupancy				
Hold Time	The time (measured in minutes) that occupancy must NOT be detected for a fixture to transition from Task state back to Background state.	0 min	60 min	10 min
Group Hold Time	The time (measured in minutes) that any fixture in a room or zone of fixtures must NOT detect occupancy for the entire of fixtures to transition from Background state to Standby state.	0 min	60 min	10 min
Strategy	This parameter switches between Occupancy and Vacancy modes	Auto ON/OFF	Man On/Auto OFF	Auto ON/OFF
Dwell Time	The time (measured in sec) that occupancy must be detected for a fixture to transition from Background state to Task state.	0 sec	300 sec	5 sec
Occupancy Sensitivity	The sensitivity of the motion sensor.	1	5	5
Occupancy Indicator	This parameter switches between Indicator OFF Indicator ON mode.	OFF	ON	ON
Daylight Harvesting				
Low Ambient Threshold	The light level above which the daylight harvesting dimming will start, given as a percentage of the fixture's own light output.	10%	800%	250%
High Ambient Output	Indicates whether the light should be turned off or remain on at its min dim output when the high ambient threshold is exceeded.	OFF	ON	OFF

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