

Catron AI

Wireless switch interface device



Product Overview

Catron AI is a switch interface which can be connected to 4-toggle switches or push-button switches and a dimmer switch, to control intensity and CCT of luminaires. This compact device has a built-in Bluetooth Module which enables it to communicate with the lighting network wirelessly. It is a part of the Lumos Controls ecosystem, comprising controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards.

The device can be configured, commissioned, and controlled from any mobile device super-quick and can connect to the Lumos Controls cloud for data analytics.

The ecosystem is listed by the **Design Lights Consortium (DLC)**, qualifying it for energy conservation incentive programs and rebates by utility companies.

Specifications

Electrical

Specifications	Value	Remarks
Input voltage	90-277VAC	Rated input voltage
Input current	10-50mA	@230VAC, @90VAC
Frequency	50/60Hz	
Inrush current	4A	
Surge protection	4kV	@Line to Line: Bi-Wave
Standby current	9mA	@Line to Line Bi Wave

Features

- Connect any 4-toggle switch or push button switch and a dimmer
- Control ON/OFF and intensity of luminaires
- Compact form factor for easy and clean integration within a junction box
- Compatible with dry contact relays
- Provision for custom configuration of switches using Lumos Controls Mobile App

0-10V input

Specifications	Value	Remarks
Number of channels	1	Applicable for slider/ rotary dimmer switches
Voltage range	0-10VDC	
Dimming range	0-100%	

Switch Input

Specifications	Value	Remarks
Number of channels	4	Applicable for toggle /push-button switches
Voltage range	0-3.3VDC	

Bluetooth

Specifications	Value	Remarks
Frequency range	2402-2480MHz	
Max output power	8dBm	
Receive sensitivity	-95dBm	
Connection distance (device to device)	45m, 147.6ft	Vary depending on the installation environment

Environmental

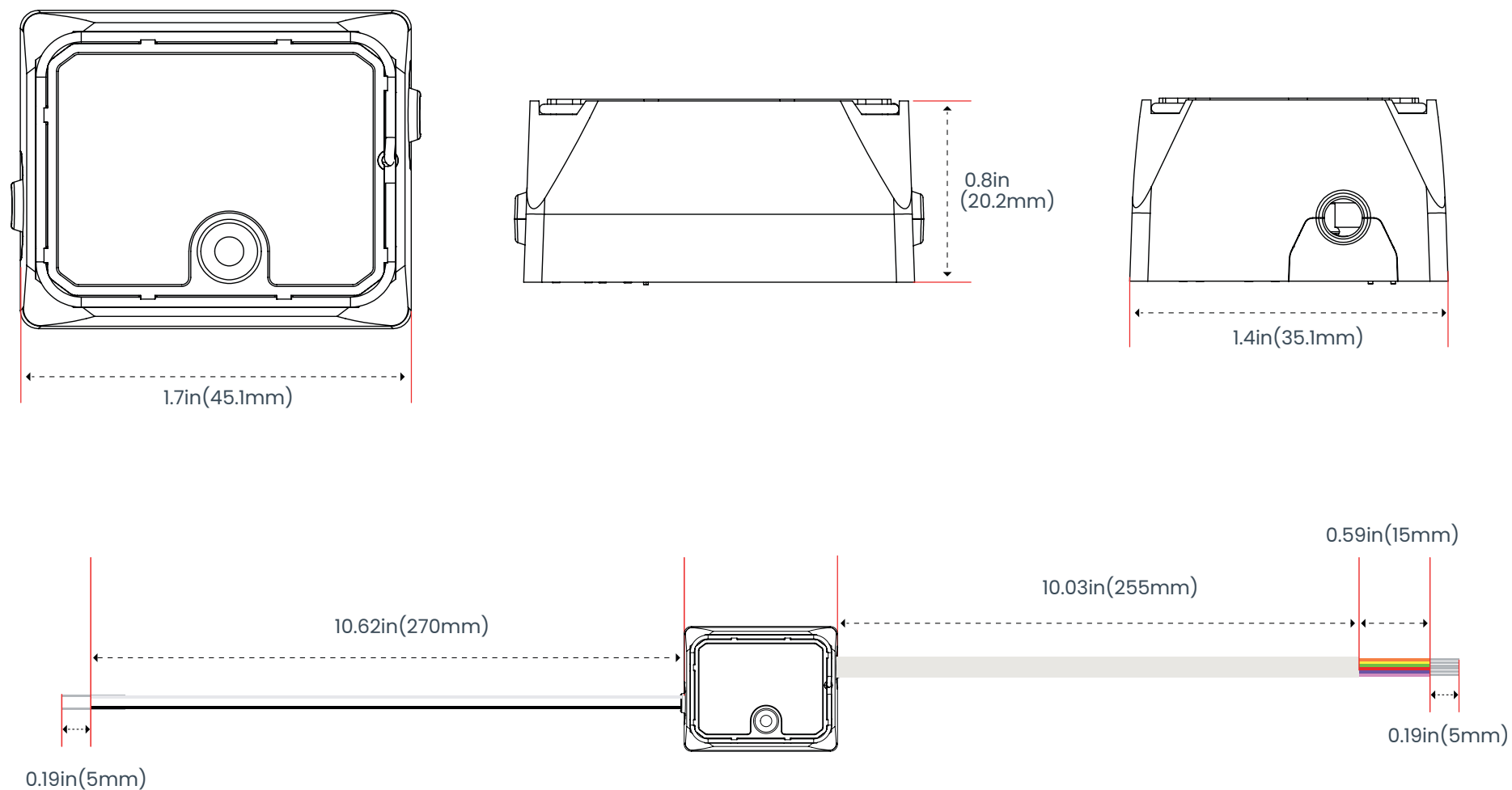
Specifications	Value
Operating temperature	-20 to 50°C (-4 to 122°F)
Relative humidity	20 to 85%

Mechanical

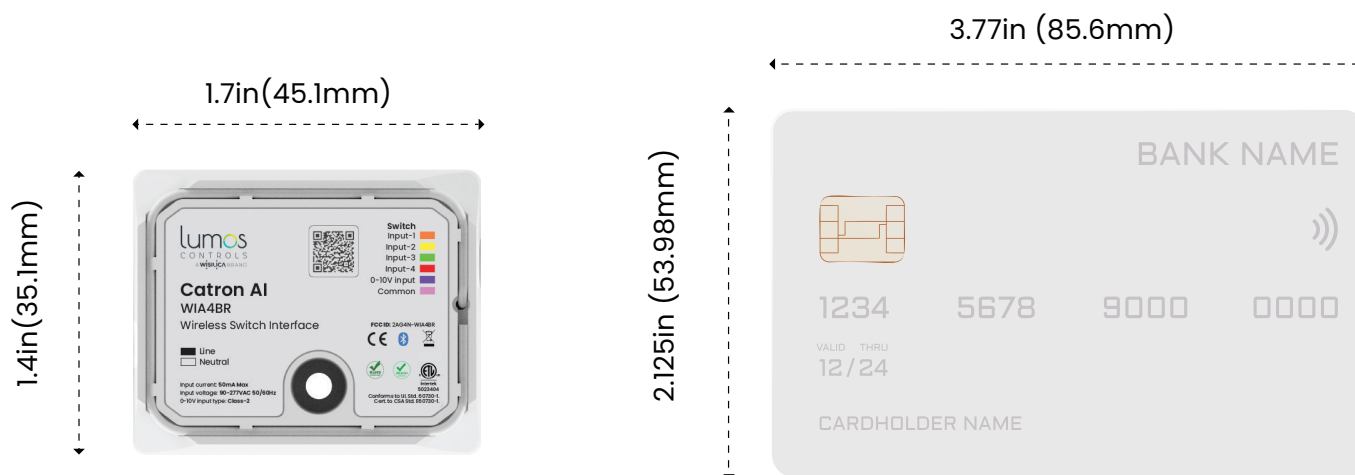
Specifications	Value	Remarks
Dimension	45.1 x 35.1x 20.2 (mm) 1.7x1.4x0.8 (in)	L x W x H
Weight	30.0g(1.06 oz)	
Case material	Polycarbonate	White color
Flammability rating	UL 94 V-0	

Product Dimensions

Catron AI Top view: 43mm x 35mm x 20mm (L x W x H)



Size comparison with a standard credit card



Wire Description



Pin	Name	Color	Gauge	Rating	Description
1	Line	Black	18AWG (0.75mm ²)	300V	90-277VAC
2	Neutral	White	18AWG (0.75mm ²)	300V	Common neutral
3	Switch Input -1	Orange	28AWG (0.08mm ²)	30V	3.3V Switch input
4	Switch Input-2	Yellow	28AWG (0.08mm ²)	30V	3.3V Switch input
5	Switch Input-3	Green	28AWG (0.08mm ²)	30V	3.3V Switch input
6	Switch Input-4	Red	28AWG (0.08mm ²)	30V	3.3V Switch input
7	0-10V input	Purple	28AWG (0.08mm ²)	30V	0-10V Dimming input
8	Common ground	Pink	28AWG (0.08mm ²)	30V	Common ground

Antenna Information

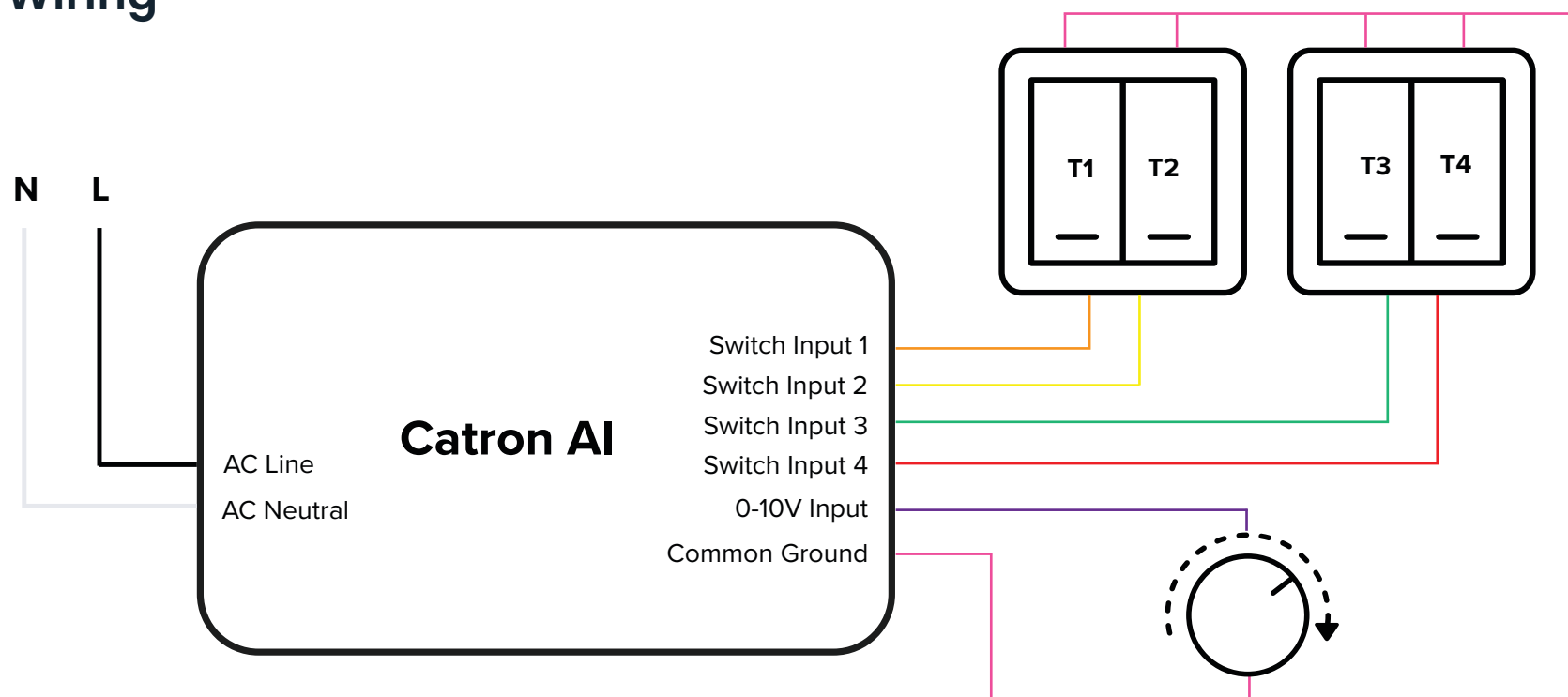
150mm wire antenna



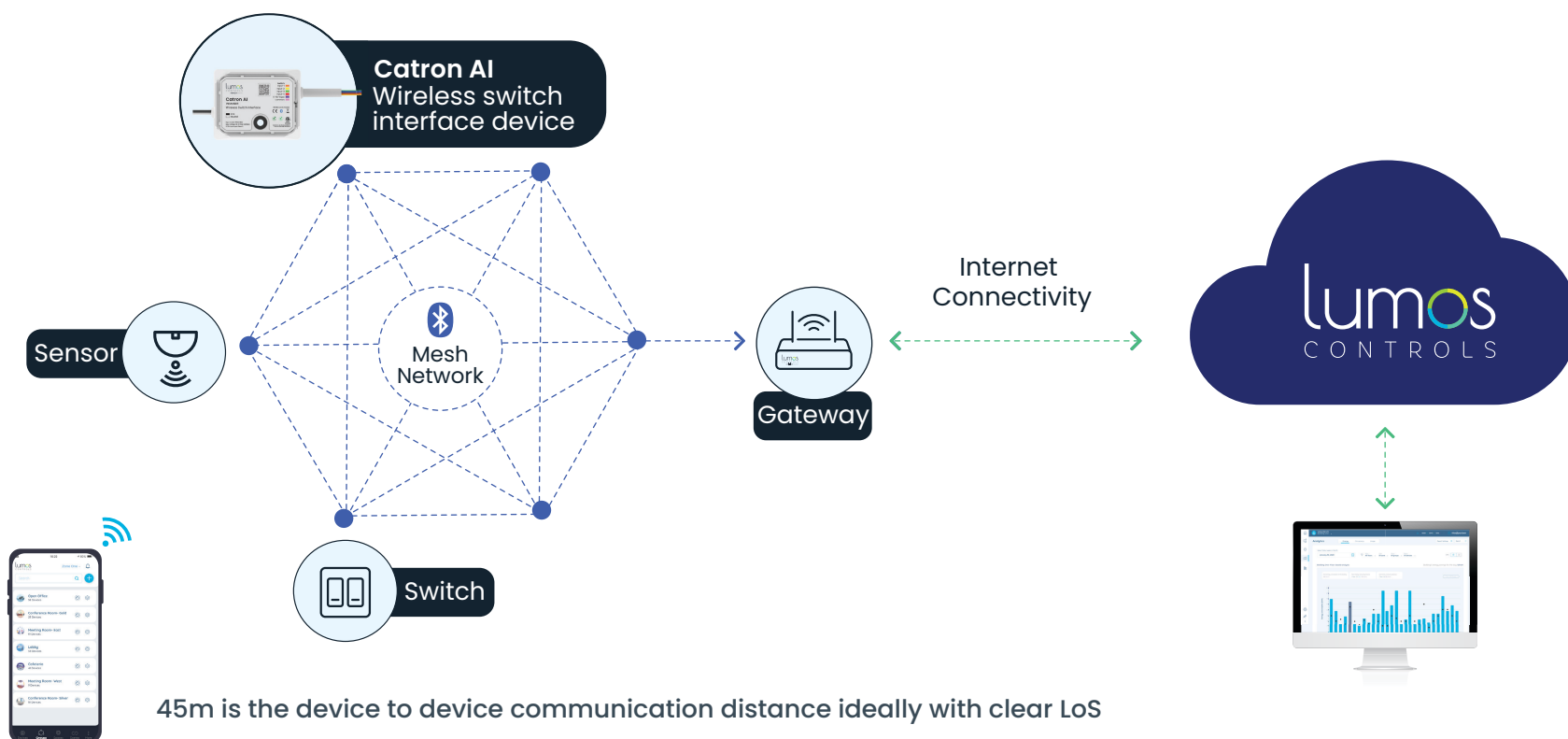
Antenna Properties

Frequency range	2.4GHz-2.5GHz
Impedance	50Ω Nominal
VSWR	1.92:1 Max
Return loss	-10dB Max
Gain(peak)	1.5dBi
Cable loss	0.3dBi Max
Polarization	Linear

Wiring

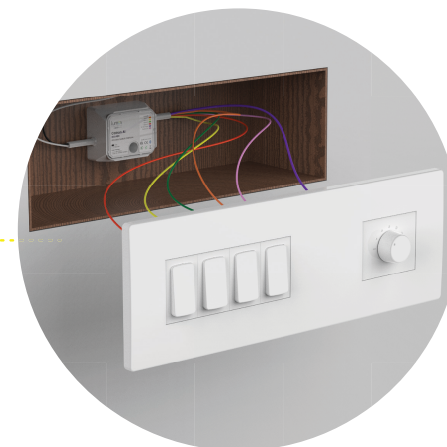


Smart Ecosystem



Certifications	Details
CE	<p>Article 3, RED 2014/53/EU</p> <p>EMC test standards</p> <p>ETSI EN 301 489-1 V2.2.3(2019-11)</p> <p>ETSI EN 301 489-17 V3.2.4(2020-09)</p> <p>EN 55032: 2015/A11:2020</p> <p>EN 55035: 2017+A11 :2020</p> <p>Safety test standard</p> <p>IEC 62368-1:2014+A11: 2017</p> <p>Radio test standard</p> <p>ETSI EN 300 328 V2.2.2 (2019-07)</p> <p>Health test standard</p> <p>EN 62479: 2010</p> <p>EN 50663: 2017</p>
cETLus	Standard: UL 60730-1
FCC	ID: 2AG4N-WIA4BR
RoHS 2.0	RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
REACH	Regulation (EC) No 1907/2006 of REACH
WEEE	under the WEEE Directive: 2012/19/EU
Bluetooth	Declaration ID: D059551

Application



Catron AI

Items included in the package box

- Catron AI
- User manual
- Screw
- Wall plug

Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating	Input Channels
WIA4BR	Catron AI	Wireless Switch Interface Device	BLE 5.2	90-277VAC	3.3V Switch Input, 0-10V dimming

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by WiSilica Inc. is under license. Other trademarks and trade names are those of their respective owners.



20321 Lake Forest Dr D6,
Lake Forest, CA 92630

www.lumoscontrols.com
+1 949-397-9330