



# Self-powered Key Card Switch

The **ILLUMRA™ Key Card Switch** is a battery-free wireless transmitter that communicates with a wide variety of receivers. Every time a card is inserted a small micro-generator produces a small electrical current that powers a built-in transmitter, signaling the receiver to turn the power supply to a device on. It signals the receiver to turn the power supply off again when the card is removed.

## Save Time, Energy, and Money

Adding Key Card switches avoids tearing open walls, or running wires to light fixtures or thermostats.



## Features:

- Battery-free wireless control
- Generic card functionality
- Supports thermostat control with vacancy
- Can surface mount anywhere (screws or adhesive tape)
- Operates with all 902Mhz ILLUMRA controllers



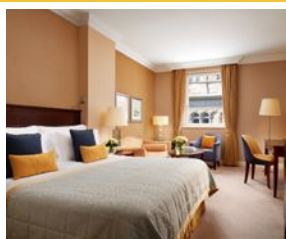
## Applications



Retrofitting



New Construction



Hotel Rooms



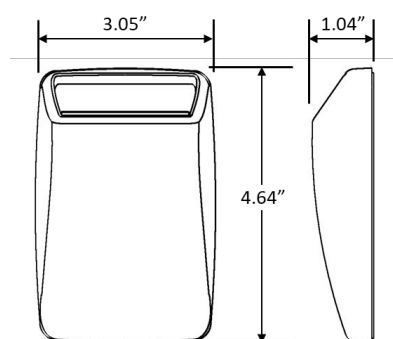
Barracks



Dorm Rooms



Architectural White



## Technical Spec:

## E9T-C2AWH Model

Range	50-150 feet (typical)
Frequency	902 MHz; EEPs: F6-02-01, F6-02-02
Power Supply	EnOcean Self-generated when card is inserted
Switches	2 (card IN, card OUT)
Output Channels	Only limited by number of receivers in range
Switch Dim. (in.)- Card Dim. (in.)	3.05"(W) x 4.64"(H) x 1.04"(D) 2.125" (W) x 3.0" (L) (recommended)
Amb. Op. Temp.◇ [Storage Temp.]	-13° to +149°F (-25° to +65°C) [-13° to +149°F (-25° to +65°C)]
Radio Certification	FCC (United States): SZV-PTM215U I.C. (Canada): 5713A-PTM215U
Addressing	Factory set unique ID (1 of 4 Billion)

◇ Temp. difference between controllers and switches should not exceed 140° F (60°C)

## Ordering (example: E9T-S2HBK):

E9T	-	C	2	A	
E9T = EnOcean 902MHz**		C = Card Switch	2 = Dual Action	A = American Style	WH = White

This device or certain aspects thereof is protected by at least one U.S. or International patent or has at least one such patent application pending



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## COMPATIBILITY

Name	Model	Uses
Wireless On/Off LED Fixture Controller	E9X-RUV-3HOTP	On/Off controller for light fixture (5A)
Wireless On/Off Area Room Controller	E9X-RUV-4IBTP	On/Off area controller (20A) 4 wire, dry contact
8 Channel Low Voltage Relay Receiver	E9R-R04FP-8	Operate dry contact relays for HVAC, 3 phase motors, gates, lighting, etc...

## LINKS

[Product Page](#)



E9X-RUV-4IBT



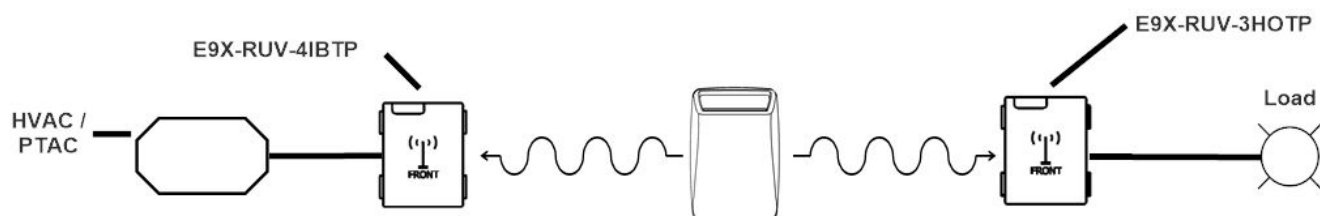
E9X-RUV-3HOTP



E9R-R04FP-8



## System Diagram -



## BID SPECIFICATION -

### SELF-POWERED WIRELESS SWITCHES

#### Part 1. Wireless Dual Action Self-Powered Key Card Switches

##### 1. Self-Powered Wireless Key Card Switches

- a. E9T-C2AWH Illumra Dual Action style Key Card switch by Ad Hoc Electronics Inc., or equal

##### 2. Mechanical

- a. Key Card Switches shall be Self-Powered, kinetic energy harvesting, and wireless.
- b. Key Card Switches shall be dual action (in / out) configuration.
- c. All Key Card Switches shall be available in Architectural White.
- d. Switches shall have a fully enclosed electronics assembly.
- e. Switches shall be constructed of ABS/PC plastic.

##### 3. Electrical

- a. Key Card Switches shall use 902 MHz EnOcean radios. Systems that use other radio frequencies shall not be acceptable.
- b. Key Card Switches shall have a lateral range of at least 18 m (60 ft.) – commercial office space (typical), up to 30 m (150 ft.) line of sight.
- c. Key Card Switches shall comply with FCC Part 15.231 and IC RSS- 210.

##### 4. Functional

- a. Key Card Switches shall be able to switch loads on and off when used with compatible ILLUMRA relays and controllers.
- b. Key Card Switches shall be able to be manually paired with compatible ILLUMRA relays and controllers.
- c. Key Card Switches shall be tested to exceed 250,000 presses.

##### 5. Compliance

- a. Key Card Switches must be capable of meeting Buy American Act compliance.