Wireless switches & keypads

Battery-free switches, key card and keypads on EnOcean 902 MHz, Bluetooth and Zigbee

Made by ILLUMRA Self-Powered Wireless Controls

Press the rocker and the press itself powers the radio message, so these switches need no wire and no battery for decades. Stick one to glass, brick or a desk, link it to a controller in seconds, and move it when the floor plan changes.

150 ft
open-air range, 902 MHz

300,000+
presses tested

0
batteries

Features

- Kinetic energy harvesting: no wires, no batteries
- Tested to over 300,000 presses, up to 30 years of service
- Standard US switch size; fits decorator wall plates
- One switch controls an unlimited number of controllers in range
- Single and dual rocker, European style, handheld and key card options
- Bluetooth 4-, 5- and 8-button keypads for scenes
- Zigbee rocker versions for Zigbee systems
- Custom engraving service available



Rocker switches


Keypads


Handheld remote


Key card switch

Specifications

Specification	E9T rockers (902 MHz)	BTT rockers (Bluetooth)	E9T-C2AWH key card
Power	Self-generated on press	Self-generated on press	Electrodynamic, card insertion
Frequency	902 MHz EnOcean	2.4 GHz Bluetooth	902 MHz EnOcean
Range	Up to 150 ft (45 m) open air	30–100 ft typical	—
Transmit power	10 mW (10 dBm), DSSS	—	—
Buttons	2 (single rocker) or 4 (dual rocker)	2 (single) or 4 (dual)	Card in / out
Dimensions	Standard US switch size	2.75 × 4.5 × 0.62 in	3.05 × 4.65 × 1.04 in
Operating temperature	—	—	-13 °F to 149 °F
Enclosure	—	—	NEMA 1 (IP40), ABS UL94 V-0

Specification	E9T rockers (902 MHz)	BTT rockers (Bluetooth)	E9T-C2AWH key card
Addressing	Factory-set unique ID	Factory-set unique ID (1 of 4 billion)	Factory-set unique ID

Ordering information

Model	Description
E9T-S1A / E9T-S2A	Single / dual rocker switch, 902 MHz (WH and other colors)
E9T-S1E / E9T-S2E	Single / dual rocker, European style, 3.16 × 3.16 × 0.40 in
E9T-S2H	Handheld 4-button remote, 50–150 ft
E9T-B1S	Push-button switch
E9T-C2AWH	Key card switch
BTT-S1A / BTT-S2A	Single / dual rocker switch, Bluetooth
BTT-B1S	Push-button switch, Bluetooth
BTT-S4B / BTX-S5BWH / BTT-S8BWH	4-, 5- and 8-button keypads, Bluetooth
ZBT-S1A / ZBT-S2A	Single / dual rocker switch, Zigbee
E9K-B11WH / E9K-B21WH / E9K-BF12WH	Kits: basic, 3-way, fan/light
NWO-IP710	Wired 0-10V dimming slider
SRV-PRINT	Custom engraving service

Applications

- Glass walls and open plans
- Historic buildings and retrofits
- Hotels and dorms (key card)
- Conference rooms (scene keypads)

Application notes

- Link a switch to a controller by pressing the controller's learn button, then the switch's ON button three times.
- 902 MHz switches pair with E9X controllers; Bluetooth and Zigbee switches pair with their own systems.

Data from ILLUMRA data sheets (E9T-SxA, E9T-SxE, E9T-C2AWH/E9T-S2H, BTT-S1A/S2A); distributor listings. Energio Sensors products are manufactured by ILLUMRA and specified, sold and supported in North America by Energio Brands. Specifications are subject to change; confirm against the manufacturer's current data before submittal. Product images courtesy of the manufacturer. All trademarks belong to their respective owners.