Energio SENSORS

Technical data sheet

ES-TS-105

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Self-powered wireless sensors

Solar-harvesting occupancy, light and contact sensors on EnOcean 902 MHz and Bluetooth

Made by ILLUMRA™ Self-Powered Wireless Controls

These sensors power themselves from indoor light, so they mount anywhere with no wire and no battery change. They talk to Energio Sensors wireless controllers on the EnOcean 902 MHz protocol, or to Bluetooth mesh fixtures, and a coin-cell tray is there for dark corners.

Features

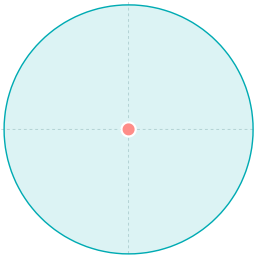
- Integrated solar cell harvests indoor light; optional CR2032 backup
- 902 MHz EnOcean radio; one sensor can signal unlimited controllers in range
- Ceiling, high bay and wall occupancy sensors with 360° or directional coverage
- Motion + light combination sensors for daylight harvesting
- Window/door contact sensors for HVAC interlocks
- Bluetooth mesh and 0-10V wired fixture sensors for fixture-level control
- Built-in tests confirm operation at the installed location
- Pre-linking available to cut on-site commissioning

0
wires or batteries

80 ft
transmission range (E9T-OSC)

80 h
operation in darkness

Coverage



E9T-OSC · 34 ft Ø at 7–10 ft

E9T-OSH covers 60 ft Ø at 33 ft mounting height.



E9T-OSC ceiling



E9T-OSW wall



PIR and light sensor



Window/door sensor



Fixture sensor

Specifications

Specification	E9T-OSC ceiling	E9T-OSH high bay	E9T-OSW wall
Power	Indoor light harvesting; CR2032 or 3–5 V DC option	Indoor light harvesting; CR2032 or 3–5 V DC option	Indoor light harvesting; CR2032 or 3–5 V DC option
Radio	902 MHz EnOcean (EEP A5-07-01)	902 MHz EnOcean	902 MHz EnOcean (EEP A5-07-01)
Transmission range	80 ft (25 m)	160 ft (50 m)	80 ft (25 m)

Specification	E9T-OSC ceiling	E9T-OSH high bay	E9T-OSW wall
Detection	PIR, 360°, 34 ft (10 m) Ø	PIR, 360°, 60 ft (18 m) Ø at 33 ft	PIR; 50 ft wide-angle / 100 ft long-range lens
Mounting height	7–10 ft (2–3 m)	15–40 ft (5–12.2 m)	6–8 ft (2–3 m)
Operation in darkness	80 h after full charge	—	—
Dimensions	6.5 × 2.36 × 1.47 in	6.5 × 2.35 × 1.47 in	5.83 × 2.52 × 1.8 in
Compliance	FCC SZV-STM300U	FCC, IC, CE, RoHS	FCC SZV-STM300U

Ordering information

Model	Description
E9T-OSC	Ceiling-mount occupancy sensor, 360°, self-powered
E9T-OSH	High bay ceiling occupancy sensor, self-powered
E9T-OSW	Wall-mounted occupancy sensor, wide-angle and long-range lenses
E9T-MDS	Motion detector & illumination sensor, NFC set-up
E9T-OBP	Wireless PIR and light sensor
E9T-LLS	Battery-free light level sensor
E9T-MCS	Window/door contact sensor, battery backup
E9T-MDCCP	Solar window/door contact sensor
NWO-DUV-OCC	0-10V high bay fixture sensor
BTX-DUV-OCC	Bluetooth mesh motion + light fixture sensor
NWO-OFX	Bluetooth PIR wired occupancy sensor

Applications

- Conference rooms, classrooms, offices
- Warehouses and high bay (E9T-OSH)
- Glass walls, historic and hard-to-wire buildings
- HVAC interlock on windows and doors

Application notes

- Link each sensor to an E9X controller (see ES-TS-107). Default unoccupied transmissions at 10 and 30 minutes after last motion (E9T-OSC).
- In very low light, fit the CR2032 battery or wire 3–5 V DC.
- E9T-MDS operates up to four days in darkness when fully charged; default off time 15 minutes.

Data from ILLUMRA data sheets E9T-OSC, E9T-OSH, E9T-OSW; EnOcean Alliance 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.