



# 902 MHz Motion Detector with Illumination Sensor

## E9T-MDS

E9T-MDS reports motion detection and illumination measurements wirelessly using the EnOcean radio standard and therefore does not require any wiring.

Key parameters of E9T-MDS can be configured using a mobile phone and the integrated NFC (ISO 14443) interface. Additionally, it has a simple configuration interface consisting of one button, one switch and one LED allowing for configuration without additional tools.

E9T-MDS transmits the measured light level and the status of the motion detection sensor on a periodic basis. The motion sensor of E9T-MDS is permanently active so that motion will be reported immediately.

E9T-MDS supports secure communication with AES-128 encryption and authentication based on a random, device-unique private key.

**Wireless Motion and Light sensor** shares data through 902 MHz to gateways and access points for integration with IOT devices.

**Key applications** include lighting control based on presence and ambient light level as well as space utilization and occupancy monitoring.



**Self Powered** sensor uses a photocell to collect and store energy from ambient indoor light for operation in complete darkness for up to 4 days. An option battery may be installed for operation in rooms that may be dark for longer than 4 days at a time.

### SPECIFICATIONS

Part Number	E9T-MDS
Power Supply	Integrated solar cell
Transmission Power	+99 dBμV
Motion Detection Radius	typ. 16.5 ft (5 m) when installed 8.5 ft (2.5 m) high
Light Level Sensor Range / Accuracy	0 ... 65000 Lux / +/- 10 %
Recommended Installation	Ceiling-mounted at 8.5 ft (2.5 m) - 10 ft (3 m) height
RF Communications	902.875 MHz
Required Light Level	200 lux for 6 hours per day
Operation Time Without Light	96 hours
Backup Battery Type	CR2032 coin cell (optional)
Transmission Range	typ. 656 ft (200 m) free field / 98.5 ft (30 m) indoor (for guidance only)
Operating Conditions	32 °F (0 °C) - 140 °F (60 °C) Indoor use only 20 % r.h.- 85 % r.h. Non-condensing
Dimensions	4.46" L x 2.58" W x 1.21" H (113,2 mm L x 65,5 mm W x 30,7 mm H)
Radio Certifications	FCC (US), ISED (Canada)

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