MWS105E · Keilton+autani

Microwave sensor for luminaire integration

The MWS105E uses microwaves to detect whether anyone is moving. It is very flat and sits in the luminaire, in principle even concealed behind thin, non-metallic covers. It has no radio of its own: the FA102 Bluetooth node or a controller takes care of that.



2.4–6 m
Mounting height
4.6 to 6 m is recommended by the manufacturer.

6–12 m
Detection range
Depending on mounting height – how far movement is detected.

0–100 %
Sensitivity
Adjustable to the room via the app (A0 version).

0.1 W
Power consumption
The sensor's own consumption – very low.

BENEFITS

What the MWS105E does for you

- **Invisible in the luminaire**
  Microwaves work through thin, non-metallic covers – check the material first.
- **Two-step dimming**
  When the room is empty, first a reduced level, then off.
- **Suits every room**
  Sensitivity and time delay are set in the app.

AT A GLANCE

What's inside

Detects	**movement by microwave**
Wireless	**via FA102 or controller**
Size	**approx. 45 × 21 × 12 mm**
Versions	**A0 adjustable, B1 fixed**
Ingress protection	**IP20, for indoor use**

IN THE SYSTEM

How the MWS105E fits in

MWS105E
in the luminaire, detects movement
→
FA102
Bluetooth node powers and connects
→
Bluetooth mesh
luminaires network wirelessly
→
AU-Manager
Analysis, schedules, remote access

Luminaires with a concealed sensor also deliver occupancy, zone and status data to the AU-Manager.

A GOOD FIT IF …

- ✓ Corridors, stairwells and ancillary rooms
- ✓ Underground car parks, in suitable luminaires
- ✓ Luminaires with 0-10 V dim-to-off driver and FA102

DIFFERENT REQUIREMENT?

With daylight harvesting in offices	**IFS105SE / IFS108**
Wireless retrofit, battery-powered	**BCS107**
Outdoor and damp areas	**EFS106W**
Halls from 6 m height	**EFS106 / EFS104**

Building Robotics Europe
Zum Frischemarkt 4 · 04158 Leipzig · Germany

Planning and installation: info@buildingrobotics.de · +49 30 4397929208 · buildingrobotics.de/en/sensors/mws105e/
Manufacturer data (Keilton+autani), as of November 2026. Subject to technical changes.

Technical data

ELECTRICAL AND CONNECTION		
Input voltage	**12 V DC**	Comes from the FA102 or controller.
Power consumption	**0.1 W**	The sensor's own consumption – very low.
Communication	**Eco sensor without its own Bluetooth, via FA102, PPA102S or Keilton BT driver**	Sensor without its own radio, connected by cable.

DETECTION		
Sensing	**Microwave (HF)**	Microwaves detect movement, even behind covers.
Mounting height	**2.4–6 m (8–20 ft)**	Distance between sensor and floor.
Detection range	**6–12 m (20–40 ft)**	How far movement is detected – depends on height.
Variants	**MWS105E.A0 (adjustable sensitivity), MWS105E.B1 (fixed)**	A0 with adjustable, B1 with fixed sensitivity.

ENVIRONMENT AND HOUSING		
Temperature range	**–30 °C to 55 °C**	Wide range, also for unheated rooms.
Ingress protection	**IP20**	For dry indoor spaces.
Housing	**Flame-retardant plastic (class V-0), white**	
Dimensions	**approx. 45.2 × 21.2 × 11.5 mm**	Very flat, fits inside the luminaire.
Standards	**CE, RoHS (EU Directive 2011/65/EU)**	CE-marked for the EU market, no restricted substances.

INSTALLATION

Fitted flat inside the luminaire

Fit
Place the sensor in the luminaire; check the cover material first.

Connect
CC cable to the FA102, FC cable to the driver (not included).

Switch on
Switch on the luminaire; the FA102 supplies the sensor with 12 V.

Adjust
Set time delay, dimming levels and sensitivity in the app.

ORDERING

Items and accessories

MWS105E.A0	Microwave sensor, adjustable sensitivity
CC30	Cable PH2.0-4P, 300 mm (adapter–sensor)
FA102	Bluetooth Node

FREQUENTLY ASKED QUESTIONS

Does the MWS105E work on its own?
No. According to the manufacturer, it needs a host device: the FA102 luminaire adapter with a 0-10 V dim-to-off driver, a PPA102S luminaire controller or a Keilton Bluetooth driver. The sensor itself has no Bluetooth.

Can the sensitivity be adjusted?
Yes, on the MWS105E.A0 from 0 to 100 % via the Keilton+autani app. The MWS105E.B1 version has fixed sensitivity.

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