

Delmatic's innovative macroclimate sensor extends digital monitoring capabilities beyond lighting presence and daylight control to include environmental temperature, humidity measurement, air quality detection and BLE capabilities, allowing a wealth of data sharing and true SMART Building Integration.

The software-defined smart sensor measures presence and absence, ambient light, temperature, air quality, total volatile organic compounds and equivalent CO<sub>2</sub>. The sensor is available in a wired DALI-2 format or with wireless connectivity and BLE Bluetooth® capabilities.

The multi-discipline microsensors form part of Delmatic's network of sensors, controllers and software, with optional green features including hours-run monitoring, virtual energy monitoring and energy use analysis dashboards.



## features



**Passive infra-red PIR sensor.** Software-configurable presence/absence detection mode and software-adjustable time-out.



**Light level sensor for daylight linking/harvesting.** Software-configurable default illumination levels, photocell thresholds and other parameters.



**Active infra-red receiver** for user adjustment and task tuning of lighting levels and scenes, temperature, blinds/shades and other services.



**High resolution temperature sensor** for real-time monitoring of space temperature for BACnet / MQTT sharing with iBMS/BOS.



**High resolution humidity sensor** for real-time monitoring of space humidity for BACnet / MQTT sharing with iBMS/BOS.



**BLE Bluetooth® beacon enabled sensor** for real-time asset tracking, wayfinding and receiver for self-powered switches.



**Air quality index sensor** for real-time monitoring of air quality for BACnet / MQTT sharing with iBMS/BOS



**Total volatile organic compounds sensor** for real-time monitoring of TVOC's for BACnet / MQTT sharing with iBMS/BOS



**Equivalent CO<sub>2</sub> sensor** for real-time monitoring of eCO<sub>2</sub> for BACnet / MQTT sharing with iBMS/



**DALI-2 tested and independently qualified** by DiiA DALI Alliance.

## smart sensors, smart data



Delmatic's data-rich DALI-2 MacroClimate sensors form the core of a smart building. The smart sensors constantly monitor, continually assess, and imperceptibly adjust and optimise lighting and connected services, while seamlessly sharing data across the IT and IOT network.

Real-time granular intelligence is disseminated to other building services via open technologies including BACnet, MQTT and Modbus with seamless connectivity to EnOcean self-powered switches via BLE. This is then combined with resource planning to optimise employee wellbeing, facilities management, as well as real estate and business strategies.

### technical details

occupancy sensor	passive infra-red. quad element
detection diameter	5m at 2.5m mounting height
lux sensor	photo-diode. accuracy: +/-5% across range
temperature sensor	range: 5°C to 50°C. ±0.5 °C accuracy
humidity sensor	range: 20% to 80% RH. ±3.0 %RH accuracy
height (above ceiling)	30 mm plus cable
depth (below ceiling)	1 mm
body diameter	39 mm
bezel diameter:	49 mm
cut-out diameter:	40 mm

### design and mounting

The compact, low-profile design of the sensor incorporates a slim bezel and flat lens which blends discretely into the ceiling.

A compact adaptor is also available to suit surface-mount besa-box installations.