

**DESCRIPTION**

The eye of GoOee’s ecosystem is our unique sensor platform. It is designed to capture environmental data and human activity, along with monitoring the luminaires performance.

Facing downwards – the sensor has the capability of detecting motion, direction, ambient light levels and operating temperature. Upwards – the sensor monitors, light intensity and colour quality for predictive maintenance benefits.

Our sensor board is designed for discrete integration into a variety of luminaires providing a convergence of technology infrastructure within buildings, using lighting-as-a-host. Functionality includes; absence and presence detection as well as ambient light sensing (ALS) for daylight harvesting. This replaces the need for additional PIRs and ALS sensors.

We also provide a housed version of the sensor board. This retrofit solution is achievable with a direct wired connection to our WIM. Surface mountable or attachable via an adjustable clip to the side of standard luminaires such as downlights and panels.

**FEATURES**

- Built-in edge processing – no images transferred outside of the device (GSC1)
- Absence and presence motion detection (under normal ambient light conditions – GSC1)
- Ambient light measurement (GSC1)
- Light level relative to an initial measured value (GSC2)
- Light relative colourpoint RGB (GSC2)
- Motion detection (no/ low light levels – PIR)
- Supports OTA firmware updates (for later introduction of additional functionality)



G-95-0003 Rev A

**TECHNICAL SUMMARY**

**Physical Characteristics**

|                 |                       |
|-----------------|-----------------------|
| Dimensions (mm) | 26.5 x 12 x 7mm       |
| Dimensions (in) | 1.04" x 0.47" x 0.27" |

**Environmental Requirements** Intended for indoor use only!

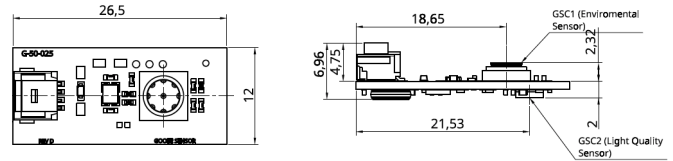
|                     |                              |
|---------------------|------------------------------|
| IP Rating           | IP20                         |
| Ambient Temperature | 0°C to 70°C<br>32°F to 158°F |

**Electrical Supply**

|                   |                              |
|-------------------|------------------------------|
| DC Supply voltage | 3.3V                         |
| DC Supply current | 16.5mA (GSC1 + GSC2 variant) |

**Physical Interfaces (Wired)**

Connection to WIM via 4 pole connector  
Molex Pico-Clasp™ 1.00mm (501939-0400)



**Detection Capabilities**

GSC1 Optic – 65° FOV (Example coverage @ 3m height = 3.8m x 3.8m [14.4m<sup>2</sup>])  
PIR Fresnel – 85° FOV (Example coverage @ 3m height = 5m x 5m [25m<sup>2</sup>])\*

**Application Requirements**

Upper window (GSC2) to be placed in-line with light output or able to read light spill

**Architecture**

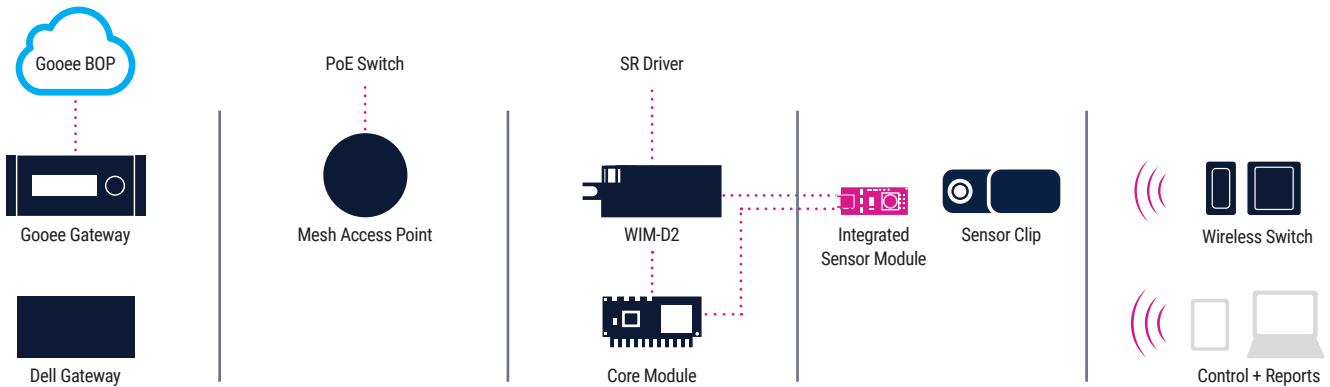
Integrated sensor ASICs with the processor, signal amplification and conversion on a single board with connectors

**ORDERING DETAILS**

| Part Ref    | Description                      |
|-------------|----------------------------------|
| G-50-0026** | Sensor module – GSC1 Assy        |
| G-50-0027** | Sensor module – GSC1 + PIR Assy  |
| G-50-0025   | Sensor module – GSC1 + GSC2 Assy |

\*\* Available 1Q19

**ECOSYSTEM ARCHITECTURE**



\* Specification subject to modification. Please enquire info@goOee.com