Our vision at Legrand is to provide products and services that make buildings more energy efficient. We are committed to putting a stop to energy waste.

This document will help you in selecting, laying out, installing and commissioning a lighting management solution. It will also help you in defining and implementing the optimum lighting management solution for specific type of building space.

CONTENTS

- p. 1 | Design steps for implementing motion & lighting management solutions
- p. 13 | Application examples for specific building spaces
- p. 22 | Catalogue pages
DESIGN STEPS FOR IMPLEMENTING MOTION & LIGHTING MANAGEMENT SOLUTIONS

Our wide range of switch sensors, comprising Motion and Lighting Management sensors, is designed to reduce the amount of time lighting is left on unnecessarily, for example if an area is unoccupied or if there is sufficient natural light.

Our Lighting Management sensors can be used to:
- **monitor the detection area for occupancy**
  - When a person is sensed the lighting is automatically switched on.
  - In case of sensors equipped with a built in light level sensor, the lighting will be kept off when enough natural light is available.
- **when the area is vacated: the lighting is switched off after a preset time delay.**
- **control lighting** (up to 60% savings on lighting energy costs according to EN 15193).
- **control HVAC circuits and roller blind circuits** (either via the sensor or a room controller).

In our range, you are sure to find the Motion or Lighting Management sensor that will suit any area and control your lighting efficiently.

1. **ASSESS THE SPACE CHARACTERISTICS**
2. **CHOOSE THE RIGHT SWITCH SENSOR**
3. **DEFINE THE BEST LOCATION**
4. **CONFIGURE THE SENSORS**
STEP 1

ASSESS THE SPACE CHARACTERISTICS

There is a dedicated solution for each area (type, configuration, activity, etc.). It is therefore essential to take the following criteria into account:

- room/space size and shape (number of m²)
- occupant activity and non-activity areas
- location of walls, doors and windows
- partition height and location
- ceiling height
- areas benefiting (or not) from natural light
- location of shelves, book cases, file cabinets, and large equipment
- large objects that would block or alter a sensor’s coverage
- location of HVAC ducts and fans
- location of desk/workspace – orientation with regard to walls, partitions and other obstacles.

To ensure you a perfect installation of the sensors and the best quality detection, here are some application examples:

P. 14 OUTDOOR CAR PARK
P. 15 WAREHOUSE
P. 16 STAIRWAY
P. 17 CORRIDOR
P. 18 INDIVIDUAL OFFICE
P. 19 CLASSROOM
P. 20 OPEN SPACE
P. 21 MEETING ROOM

Special attention should be paid to high levels of vibration and/or air flow, extreme temperature conditions, and unusually low levels of activity because these issues may help identify the best technology solution.
**STEP 2**

**CHOOSE THE RIGHT SENSOR**

Legrand has 2 categories of sensor according to the area concerned and the type of detection:

**MOTION SENSORS**
- For areas with little or no natural light.
- For passageways.
- Automatic switch-on/off according to whether or not there is anyone present.

**LIGHTING MANAGEMENT SENSORS**
- For areas with natural light.
- For passageways and/or work areas.
- Manual or automatic switch-on and automatic switch-off, according to whether or not there is anyone present and the natural light level.
- Dimming and HVAC/roller blind control for BUS sensors used with controllers.
- Can be adjusted using configuration tool.

### MOTION SENSORS

**For areas with no natural light**

These sensors are particularly suitable for areas where there is no natural light, and for passageways such as bathrooms, corridors, equipment rooms, etc.

**DETECTION TECHNOLOGY:**

**Passive infrared (PIR) technology**
Passive infrared technology detects occupancy by reacting to infrared energy sources, such as a human body in motion.

### COVERAGE PATTERNS

<table>
<thead>
<tr>
<th>Cat.Nos</th>
<th>Installation type</th>
<th>Technology Range</th>
<th>Detection area</th>
<th>Examples of applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 488 03</td>
<td>Round</td>
<td>8 m</td>
<td>m: 4 2 1 0 1 2 4</td>
<td>Ø: 8 m</td>
</tr>
<tr>
<td>0 697 40</td>
<td>Ceiling mounted</td>
<td>8 m</td>
<td>8 m 1 2 m</td>
<td>2.50 m</td>
</tr>
<tr>
<td>5 740 47 5 740 34</td>
<td>Surface mounted</td>
<td>8 m</td>
<td>m: 4 5 6 8</td>
<td>Ø: 8 m</td>
</tr>
<tr>
<td>0 489 11 0 489 31</td>
<td>Wall mounted</td>
<td>8 m</td>
<td>2.5 m</td>
<td>m: 4 6 8</td>
</tr>
</tbody>
</table>
STEP 2 _ CHOOSE THE RIGHT SENSOR

LIGHTING MANAGEMENT SENSORS
For areas with natural light

These sensors are particularly suitable for areas with natural light, whatever the type of building: shops, offices, healthcare buildings, recreation areas, warehouses or workshops, etc. The sensors have built-in adjustable lux sensors:

- lighting Management sensors will keep the lighting switched off if there is sufficient natural light
- lighting Management sensors associated with room controllers will dim automatically while maintaining a pre-set lux level according to natural daylight and will control several lighting and ventilation circuits.

1 DETECTION TECHNOLOGY

- Passive infrared (PIR) technology
  Passive infrared technology detects occupancy by reacting to infrared energy sources, such as a human body in motion.

- Dual technology (DT)
  Sensors that employ PIR + US sensing technologies are usually referred to as “dual technology”. Our Dual technology ensures maximum sensitivity and coverage in tough applications for optimum reliability and energy saving.

2 PRODUCT FEATURES

2-1. Occupancy and vacancy detection

Vacancy/Occupancy mode selection
Most Legrand sensors can work using occupancy mode (by default) or vacancy mode.

- Occupancy mode means that lights are automatically switched on or off according to occupancy.
- Vacancy mode means that lights are manually switched on and automatically switched off. Vacancy mode offers extra energy savings.

OCCUPANCY MODE
Sensors will switch on lighting automatically when a person enters the room, and switch lighting off automatically when no movement is detected.

Application:
energy saving and cost effective, can be used instead of a conventional switch.

VACANCY MODE
Upon entering the room the person switches on the light as normal, but on leaving the sensor switches off the lighting automatically.

Application:
commonly used for improved energy saving and to comply with regulations.
2-2. Daylight

Daylighting set point = Regulation

The light level feature keeps the lighting OFF when natural light levels rise above a pre-set level. This setting is adjustable and can be overridden. This function is enabled by default.

![Daylighting Set Point Diagram]

1. No presence detected, daylight, lights off
2. Presence detected, sufficient daylight, lights off
3. Presence detected, insufficient daylight, all lights on
4. No presence detected, lights off

3 COMBINATION: SENSOR + ROOM CONTROLLERS

Sensors can be combined with a room controller to manage a number of circuits in passageways with natural light, outdoors, damp areas or in work areas.

Combining a sensor and a room controller provides additional functions to:
- lighting management: on-off or dimming (DALI, 1-10 V, halogen/incandescent/LED).
  Eg: dimming the window side (access to natural light) and the corridor side separately.
- your installation: blinds, heating, fan control etc.

This combination makes your building flexible and gives you more energy savings.

The daylight is unevenly distributed in an area

A sensor is combined with each row of luminaires and measures presence and light level. The dimming controller regulates each row of luminaires and supplements the external light to obtain the required light level.
## STEP 2 _ CHOOSE THE RIGHT SENSOR

### COVERAGE PATTERNS

<table>
<thead>
<tr>
<th>Cat.Nos</th>
<th>Installation type Technology</th>
<th>Range</th>
<th>Detection area</th>
<th>Examples of applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 488 04</td>
<td>5 m</td>
<td><img src="image1" alt="Diagram" /></td>
<td>Individual office, corridor, stairways, restrooms etc.</td>
<td></td>
</tr>
<tr>
<td>0 489 14</td>
<td>8 m</td>
<td><img src="image2" alt="Diagram" /></td>
<td>Individual office</td>
<td></td>
</tr>
<tr>
<td>5 740 79, 5 740 31</td>
<td>8 m</td>
<td><img src="image3" alt="Diagram" /></td>
<td>Individual office, classroom, meeting room, open plan office</td>
<td></td>
</tr>
<tr>
<td>0 488 06/09</td>
<td>6 m (US)</td>
<td><img src="image4" alt="Diagram" /></td>
<td>Classroom, meeting room, open plan office</td>
<td></td>
</tr>
<tr>
<td>0 489 16</td>
<td>7 m (US), 12 m (PIR)</td>
<td><img src="image5" alt="Diagram" /></td>
<td>Individual office, classroom, meeting room, restrooms etc.</td>
<td></td>
</tr>
<tr>
<td>0 488 07</td>
<td>8 m</td>
<td><img src="image6" alt="Diagram" /></td>
<td>Hall, stairways etc.</td>
<td></td>
</tr>
</tbody>
</table>

[1] 1 lighting output & 1 fan output
[2] without neutral
### Examples of applications

<table>
<thead>
<tr>
<th>Cat.Nos</th>
<th>Installation type</th>
<th>Range</th>
<th>Detection area</th>
<th>Examples of applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.489 17</td>
<td>Individual office, corridor, stairways, restrooms etc.</td>
<td>15 m</td>
<td><img src="image1" alt="Diagram 1" /></td>
<td>Hall, stairways, very long areas</td>
</tr>
<tr>
<td>5740 47 5740 34</td>
<td>Individual office, classroom, meeting room, open plan office etc.</td>
<td>8 m</td>
<td><img src="image2" alt="Diagram 2" /></td>
<td>Hall, stairways</td>
</tr>
<tr>
<td>0.488 17</td>
<td>Individual office, classroom, meeting room, restrooms etc.</td>
<td>2 x 12 m</td>
<td><img src="image3" alt="Diagram 3" /></td>
<td>Long corridor</td>
</tr>
<tr>
<td>0.489 32</td>
<td>2 x 12 m</td>
<td>Ø 20 m</td>
<td><img src="image4" alt="Diagram 4" /></td>
<td>High ceiling areas (warehouses, gymnasium)</td>
</tr>
<tr>
<td>0.489 33</td>
<td>18 m</td>
<td><img src="image5" alt="Diagram 5" /></td>
<td>High ceiling areas (warehouses, gymnasium) outdoor car park, cellar, laboratory</td>
<td></td>
</tr>
</tbody>
</table>

---

1 lighting output & 1 fan output

without neutral
## STEP 2  _ CHOOSE THE RIGHT SENSOR

### ROOM CONTROLLER

<table>
<thead>
<tr>
<th>Cat. Nos</th>
<th>Installation type Technology</th>
<th>Range</th>
<th>Detection area</th>
<th>Examples of applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.488 22</td>
<td>6 m (US), 5 m (PIR)</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td>Individual office, classroom</td>
<td></td>
</tr>
<tr>
<td>0.488 23</td>
<td>7 m (US), 5 m (PIR)</td>
<td><img src="image2.png" alt="Diagram" /></td>
<td>Individual office, classroom</td>
<td></td>
</tr>
<tr>
<td>0.488 20</td>
<td>8 m</td>
<td><img src="image3.png" alt="Diagram" /></td>
<td>Individual office, classroom</td>
<td>Restrooms, changing room</td>
</tr>
<tr>
<td>0.488 24</td>
<td>8 m</td>
<td><img src="image4.png" alt="Diagram" /></td>
<td>Individual office, classroom</td>
<td>Restrooms, changing room</td>
</tr>
<tr>
<td>0.488 46</td>
<td>8 m</td>
<td><img src="image5.png" alt="Diagram" /></td>
<td>Individual office, classroom</td>
<td>Restrooms, changing room</td>
</tr>
</tbody>
</table>

*Note: The diagrams show the detection area and range of each sensor type.*
### 5 ROOM CONTROLLER - CONTROL OF CIRCUITS

In order to control several circuits (lighting, fans, blinds), Lighting Management sensors can be used with room controllers.

The following chart indicates which room controller to use:

<table>
<thead>
<tr>
<th>ON-OFF</th>
<th>DIMMING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DALI 1-10 V</td>
</tr>
<tr>
<td>1 lighting circuit in the same room</td>
<td>0 488 50</td>
</tr>
<tr>
<td>1 lighting circuit + fan output in the same room</td>
<td>0 488 50</td>
</tr>
<tr>
<td>2 lighting circuits in the same room</td>
<td>0 488 50</td>
</tr>
<tr>
<td>2 lighting circuits + 1 fan output in the same room</td>
<td>-</td>
</tr>
<tr>
<td>2 lighting circuits [2 inputs, 2 outputs] in 2 rooms</td>
<td>0 488 41</td>
</tr>
<tr>
<td>4 lighting circuits [4 inputs, 4 outputs] in 4 rooms</td>
<td>0 488 43</td>
</tr>
<tr>
<td>2 lighting circuits + 1 blind output + 1 fan output [4 inputs, 4 outputs] in the same room</td>
<td>0 488 47</td>
</tr>
</tbody>
</table>

Refer to the load table in the data sheet available online in the e-catalogue (Note: some commercially available dimmable LEDs are not compatible).
STEP 3

DEFINE THE BEST LAYOUT

Whether it is a matter of work areas or passageways, the presence sensors must be chosen and positioned in line with the following recommendations:

1 WORK AREAS

These are areas in which people spend time, such as individual or open plan offices, meeting rooms, classrooms, etc.

Positioning

For optimum detection, the sensor must have an unobstructed view (no obstacles in the sensor’s detection field).

People who are seated must be completely within the area to be monitored, and preferably as close as possible to the sensor (the detection area for seated people is much smaller than that for people who are moving around).

In small spaces preference should be given to wall-mounted sensors placed in a corner. In large, open plan offices preference should be given to ceiling sensors (with their detection areas overlapping).

Recommendations

The presence sensors must not:

- be positioned less than 1 m from sources of heat or cold (radiators, air conditioning units, etc.) which could cause “false detection”
- have a luminous flux (luminaire, window) in direct view, to ensure correct measurement of the light level.

For optimum light level measurement, the sensor must be positioned between a minimum distance (to be determined) and 4 metres maximum from the source of natural light (large or small window, etc.). The ideal distance is calculated using the formula \( d = \frac{(h_1 + h_2)}{2} \).

Dual technology detection should be given preference as it combines 2 detection technologies (IR + US), providing very reliable detection of people who are seated.
### PASSAGEWAYS

These are areas in which people "move around", such as corridors, halls, stairways, archive areas, toilets, etc.

**Positioning**

For optimum detection, the sensor must have an unobstructed view (no obstacles in the sensor’s detection field).

The following types of presence sensor can be used:
- for wall mounting, with an 180° detection area
- for ceiling mounting, with long range detection areas.

Recommendations

Access points (doors) must be fully covered by the detection areas.

The sensors must not have any luminous flux (luminaire, window) in direct view, to ensure correct measurement of the light level.

- **PIR detection** should be given preference. It provides good detection performance for people moving around, with a long detection range.

The detection areas in horizontal or vertical spaces where people move around must overlap, to avoid any blind spots.

The transverse detection performance is more important than the radial performance.
4 DIFFERENT OPERATING MODES

Occupancy (Auto on/Auto off mode)
Automatic switch-on:
- if detection of presence if there is an insufficient natural level of light.
Automatic switch-off:
- if no presence is detected and at the end of the time delay set
- or if there is a sufficient level of natural light (activated light regulation).
Any new detection causes an automatic switch on if there is insufficient light.

Walkthrough
- If there is no presence detected in the 20 seconds following an initial detection, the sensor will switch off after 3 minutes.
- If a new presence is detected in the 3 minutes following the initial detection, the device will switch off at the end of the time delay set.

Vacancy (Manual on/Auto off mode)
Manual switch-on, automatic switch-off:
- where no presence is detected and at the end of the time delay set.
Following switch-off, any new detection within a 30-second period will cause the device to be switched on automatically. After 30 seconds, the device is switched on via a manual switch.

Partial on/Group off mode
This mode is used to ungroup circuits that are switched on on detection and switched off at the end of detection.
Example: on detection I switch on the main lighting and occasional lighting can be controlled manually at the same time. At the end of detection, the sensor orders the main lighting and the occasional lighting circuits to be switched off.

MoBILITY FOR SET-UP AND MAINTENANCE

MOBILE CONFIGURATOR:

The following functions can then be adjusted:

Daylight setpoint
Value at which the load comes on if light level is below the light setting and goes off if it is above this threshold. The Daylight setpoint can be set up to a maximum of 1275 lux.
Recommendation:
- passageway and corridors: 100 lux
- stairways: 150 lux
- offices: 300 - 500 lux.

Sensitivity
For each technology, the sensitivity setting is used to:
- reduce or increase the detection area
- reduce the disturbing effects of air currents, air conditioning and air flows from heating.
To set the sensitivity levels, go to the detection area and check that the sensor covers the strategic positions in the room (entrance door, desk).

Calibration
In order to set this calibration, it is necessary to measure the surrounding light level using a luxmeter beforehand. The surrounding light level measured must then be transmitted to the sensor.

Steps for regulating the electric light factor:
- switch the light on and close the blinds
- wait 2 minutes
- measure the light level below the cell using a luxmeter.
Enter this value in the tool and send it to the cell. This calibration will be acknowledged during the next detection cycle.
APPLICATION EXAMPLES FOR SPECIFIC BUILDING SPACES
Outdoor parking

Switch-on and switch-off must be automatic according to whether or not the area is occupied and the natural light level. The sensor must withstand outdoor stresses.

**CONTROL REQUIREMENTS**

Lighting is automatically switched ON & OFF.

**Switch-on**
Automatic by presence detection as soon as the natural light level is insufficient.

**Switch-off**
Automatic when the area is no longer occupied after a time delay, or as soon as the natural light level is sufficient.

**SOLUTIONS**

1. Use PIR sensors to provide a large coverage area in terms of length & width.

   **Cat.No 0 489 33**
   PIR outdoor motion sensor
   270° with directional head
   Range 20 m
   IP 55
   For wall or ceiling mounted
   Fixed above a door, its double lens will switch on the lights as soon as the door opens. It will also provide detection over very long areas.

   **OR**

   **Cat.No 0 697 40**
   Adjustable PIR outdoor motion sensor
   Directional head to make sure lights switch on as soon as the door opens.
   360°
   Range Ø 8m
   IP 55
   Surface-mounting, on wall or ceiling.
Switch-on and switch-off must be automatic according to whether or not the area is occupied and the natural light level. The sensor must have a detection range suitable for very high areas.

**CONTROL REQUIREMENTS**

Lighting is switched ON & OFF automatically.

**Switch-on**
Automatic by presence detection.

**Switch-off**
Automatic when the area is no longer occupied after a time delay, or as soon as the natural light level is sufficient.

**SOLUTIONS**

1. **Cat.No 0489 32**
   PIR sensor
   360°
   Range Ø 20 m
   IP 55 (IP 66 with plastic cable glands)
   Surface mounting on ceiling.
Stairway

Switch-on must be triggered by a person passing and switch-off must be automatic after he/she has left.

**CONTROL REQUIREMENTS**

Lighting switched ON & OFF automatically with a motion sensor installed on each floor.

**Switch-on**
Automatic by presence detection as soon as the natural light level is insufficient.

**Switch-off**
Automatic when the area is no longer occupied, after time delay.

**SOLUTIONS**

**Cat. No 0 697 40**
Adjustable PIR motion sensor
Directional head to detect people mounting stairs 360°
Range Ø 8 m
IP 55
Surface-mounting on wall or ceiling (one sensor per floor).

**OR**

**Cat. No 0 784 57**
PIR sensor
Replace your push-buttons wired to a timer without changing the wiring 180°
Range 8 m
Auto ON/OFF
IP 41
Wall-mounting.
Corridors

Switch-on must be triggered by a person passing and switch-off must be automatic after he/she has left, but only if there is insufficient natural light.

**CONTROL REQUIREMENTS**

Lighting is switched ON & OFF automatically.

**Switch-on**

Automatic by presence detection as soon as the natural light level is insufficient.

**Switch-off**

Automatic when the area is no longer occupied after a time delay, or as soon as the natural light level is sufficient.

**SOLUTIONS**

1. Use PIR corridor sensors to provide long range front detection & ensure the detection areas overlap so that occupants are not left in the dark.

   **OR**

   **Cat.No 0488 17**
   - Infrared dual detection sensor
   - 2x180°
   - Side range 2 x 12 m
   - IP 20
   - Ceiling mounted.

   **Cat.No 0489 17**
   - PIR sensor 180°
   - Range 25 m
   - IP 42
   - Surface mounted on a wall can be mounted in/on a corner using accessory.

Using 100 lux & a 5 minute time delay will provide the right level of lighting and maximum energy savings.

For installation of 2 circuits:
1/3 luminaires is permanent, controlled by a timer, the other 2/3 are controlled by motion sensors.
Switch-on and switch-off must be automatic according to whether or not the office is occupied and the natural light level.

**CONTROL REQUIREMENTS**

Lighting and fan are switched ON manually and switched OFF automatically or manually.

- **Switch-on**
  - Manual via push-button.

- **Switch-off**
  - As soon as the natural light level is sufficient.
  - Automatic by detection that there is no-one present in the office (after time delay).
  - Manual using the push-button.

**SOLUTIONS**

1. Use dual-tech sensors to provide precise detection & avoid false switch-off.

   **Cat.No 488 06**
   - Dual-tech sensor
   - 360°
   - Range Ø 8 m
   - Manual ON-Auto OFF
   - Daylight control - 300 lux
   - IP 20 – Ceiling mounted.

   **Cat.No 5 740 49**
   - Dual-tech sensor
   - 180°
   - Maximum range 8 m
   - Manual ON-Auto OFF
   - Daylight control - 300 lux
   - IP 41
   - Wall-mounting.

   **Cat.No 0 488 04**
   - PIR sensor
   - 360°
   - Range Ø 5 m
   - High density lens with fan control IP 41
   - Ceiling mounted.

2. The push-button **Cat.No 5 720 31** can be used to control lighting circuits manually.

   Using 350 lux & a 10 minute time delay combined with Vacancy detection will ensure maximum energy savings.
The lighting is dependent both on whether the areas are occupied and on differences in the natural light level in the classroom. An additional manual control can be used to dim the lighting.

**CONTROL REQUIREMENTS**

Lighting is switched ON manually and switched OFF automatically or manually.

**Switch-on**
- Manual via push-button for the room and the board.

**Switch-off**
- As soon as the natural light level is sufficient.
- Automatic when the area in the classroom is no longer occupied, after a time delay. Automatic switch-off of the board lighting is linked to that of the classroom lighting.
- Manual using the push-button.

**Lighting regulation**
The amount of artificial lighting is adapted according to the natural light, so that a minimum lighting level is constantly maintained.

Note: users can adjust the light level to their own requirements using the push-button. Automatic management will take over again while the user is absent. The area on the window side will thus have a lower level of artificial light than that on the opposite side.

**SOLUTIONS**

**1** Cat.No 0 488 22
Dual-tech occupancy sensor
- Range Ø 20 m
- IP 20
- Ceiling mounted.

**2** Cat.No 0 488 51
Room controller for DALI and DSI dimming
- Occupancy mode, vacancy mode.
- The room controller applies a dimming difference of 30, 50 or 80% between the window and the corridor side.
- Fixed directly to the false ceiling via cable ducting.

**3** The push-button Cat.No 5 720 31 can be used to control lighting circuits manually.
The lighting must adapt to whether or not the office areas and aisles are occupied, while taking the natural light level into account.

**CONTROL REQUIREMENTS**

Lighting is switched ON manually and switched OFF automatically or manually.

**Switch-on**
- Manual via push-button or touch screen.

**Switch-off**
- Gradual, as soon as the natural light level is sufficient.
- Automatic when the area in the open plan office is no longer occupied (after a time delay).
- Manual via push-button or touch screen.

**Lighting regulation**
The amount of artificial lighting is adapted according to the natural light, so that a minimum lighting level is constantly maintained.

Note: users can adjust the light level to their own requirements using the push-button. Automatic management will take over again while the user is absent.

The area on the window side will thus have a lower level of artificial light than that on the opposite side.

**SOLUTIONS**

1. **Cat.No 0 488 22**
   - Dual-tech occupancy sensor
   - Range Ø 8 m
   - IP 20
   - Ceiling mounted.

2. **Cat.No 0 488 44**
   - Dimming room controller for DALI protocol
   - Fixed directly to the false ceiling via cable ducting.

3. The push-button **Cat.No 5 739 87** can be used to control control and dim lighting circuits manually.

4. The touch screen **Cat.No 5 739 58** can be used to activate scenarios.
Meeting room

Room occupants must be able to control and dim the light and also the blinds, screen and ventilation according to their requirements.

CONTROL REQUIREMENTS

Lighting and fan are switched ON manually and switched OFF automatically or manually.

Switch-on
Manual via push-button or touch screen.

Switch-off
- Gradual, as soon as the natural light level is sufficient.
- Automatic by detection that there is no-one present in the meeting room (after time delay).
- Manual via push-button or touch screen.

Lighting regulation
The amount of artificial lighting is adapted according to the natural light, so that a minimum lighting level is constantly maintained.

Note: users can adjust the light level to their own requirements using the push-button. The area on the window side will thus have a lower level of artificial light than that on the opposite side. The scenario push-buttons, remote control or touch screen can be used to activate projection, end of projection, full light, etc. scenarios. The ventilation will switch from ECO mode to COMFORT mode when the presence of a person is detected.

SOLUTIONS

1. Cat.No 0 488 22
   Dual-tech occupancy sensor
   Range Ø 8 m
   IP 20
   Ceiling mounted.

2. Cat.No 0 488 47
   Multi-application room controller:
   - 2 x 1-10 V dimming output
   - 1 blind output
   - 1 fan output
   Fixed directly to the false ceiling via cable ducting.

3. The push-button Cat.No 5 739 87 can be used to control and dim lighting circuits manually.

4. The touch screen Cat.No 5 739 58 can be used to activate scenarios.

5. An additional remote control Cat.No 0 882 32 can bring more flexibility for the occupants.
## Motion and Lighting Management sensors for 1 circuit

### Selection Chart

#### Areas Without Natural Light

<table>
<thead>
<tr>
<th>Areas Without Natural Light</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ceiling</td>
</tr>
<tr>
<td></td>
<td>Surface mounting</td>
</tr>
</tbody>
</table>

**Passageway**

- Hall/lobby
- Stairways/hallways
- Storage areas/technical areas

<table>
<thead>
<tr>
<th>Areas Without Natural Light</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall/lobby Stairways/hallways Storage areas/technical areas</td>
<td>0.488 03(1) 0.489 11 5.740 47</td>
</tr>
</tbody>
</table>

**Outdoor and Damp Areas**

- Indoor/external car park
- Indoor entrance areas

**Outdoor and Damp Areas**

<table>
<thead>
<tr>
<th>Areas Without Natural Light</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor/external car park Indoor entrance areas</td>
<td>IP 55</td>
</tr>
<tr>
<td>0.697 40/0.697 80 0.489 31 Fixed head 0.697 40 Directional head</td>
<td></td>
</tr>
</tbody>
</table>

### Lighting Management Sensors

#### Areas With Natural Light

**Work Areas**

- Individual office/small room
- Open plan office/classroom/meeting room

**Passageway**

- Hall/lobby
- Stairways/hallways

**Passageway**

- Hallways
- Very long areas

**Passageway**

- High ceiling areas (gymnasium, storage areas...)

**Restrooms, bathrooms Dressing room**

**Outdoor & Damp Areas**

- Indoor/outdoor car park lot
- Indoor entrance areas

#### Installation

- Automatic On-Off
- Checking permanently the presence and daylight level

1: Surface mounting box option - 2: corner mounting option - 3: 1 lighting output + 1 fan output - 4: Dedicated retrofit solution

---

**Note:**

- IP 55
- EXB13018_ Brochure motion and lighting management sensors_pages catalogue_EN.indd 22
- 27/02/14 14:14
# Lighting Management sensors and room controllers for multiple circuits control

## Selection Chart

### Choose the Sensor

<table>
<thead>
<tr>
<th>Automatic On-Off</th>
<th>Checking permanently the presence and the light level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation</td>
<td></td>
</tr>
<tr>
<td>Ceiling</td>
<td></td>
</tr>
<tr>
<td>Wall</td>
<td></td>
</tr>
<tr>
<td>Surface mounting</td>
<td></td>
</tr>
<tr>
<td>Flush-mounting</td>
<td></td>
</tr>
</tbody>
</table>

### Work Areas

#### Individual Office / Classroom

| Ø8m | 0 488 22 | 0 488 23 | 5 740 48 |

#### Passageway

#### Restrooms, changing rooms...

| Ø8m | 0 488 20 | 0 488 24 | 5 740 46 |

#### Hallways Very long areas

| Ø8m | 0 488 20 | 0 488 25 |

#### High ceiling areas (gymnasium, storage area...)

| -   | -   | -   |

### Outdoor & Damp Areas

#### Car park lot, cellar, laboratory, test room, changing room

| Ø8m | 0 488 30 |

### AND THE OUTPUTS TO BE MANAGED

<table>
<thead>
<tr>
<th>ON-OFF</th>
<th>DALI</th>
<th>1-10 V</th>
<th>DIMMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lighting circuit in the same room</td>
<td>0 488 50</td>
<td>0 488 51</td>
<td>0 488 52</td>
</tr>
<tr>
<td>1 lighting circuit + fan output in the same room</td>
<td>0 488 50</td>
<td>0 488 51</td>
<td>0 488 52</td>
</tr>
<tr>
<td>2 lighting circuits in the same room</td>
<td>0 488 50</td>
<td>0 488 51</td>
<td>0 488 52</td>
</tr>
<tr>
<td>2 lighting circuits + 1 fan output in the same room</td>
<td>-</td>
<td>0 488 51</td>
<td>-</td>
</tr>
<tr>
<td>2 lighting circuits (2 inputs, 2 outputs) in 2 rooms</td>
<td>0 488 41</td>
<td>-</td>
<td>0 488 42 (1000 VA)</td>
</tr>
<tr>
<td>4 lighting circuits (4 inputs, 4 outputs) in 4 rooms</td>
<td>0 488 43</td>
<td>0 488 44 (max. 32 ballasts)</td>
<td>0 488 43</td>
</tr>
<tr>
<td>2 lighting circuits + 1 blind output + 1 fan output (4 inputs, 4 outputs) in the same room</td>
<td>0 488 47</td>
<td>-</td>
<td>0 488 47</td>
</tr>
</tbody>
</table>

1: Refer to the load table in the data sheet available online in the e-catalogue [Note: some commercially available dimmable LEDs are not compatible]
## Motion sensors for 1 circuit

### Motion sensors for passageway without natural light

- **Automatic on/off**
- **Manual adjustment of light level threshold and time delay via potentiometer**
- **All load 8.5 A - 240 V**

### Ideal for passageways

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0489 11</td>
<td>PIR wall mounted motion sensor 180° infrared detection, range 8 m Recommended fixing height: 2.5 m 3-wire with neutral IP 42 Light level threshold: 1 to 1000 lux Adjustable time delay: 5 s to 30 min Standby consumption: 0.7 W For direct surface mounting on wall Can be mounted in/on a corner using accessory Cat.No 0489 71 (p. 28)</td>
</tr>
<tr>
<td>1</td>
<td>5740 47</td>
<td>White - without neutral</td>
</tr>
<tr>
<td>1</td>
<td>5740 34</td>
<td>White - with neutral</td>
</tr>
</tbody>
</table>

### Ideal for outdoor and damp areas

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0489 31</td>
<td>PIR wall mounted motion sensor 180° infrared detection, range 8 m Recommended fixing height: 2.5 m 3-wire with neutral IP 55 Light level threshold: 5 to 1275 lux Adjustable time delay: 5 s to 30 min Standby consumption: 0.7 W For direct surface mounting on wall Can be mounted in/on a corner using accessory Cat.No 0489 71 (p. 28)</td>
</tr>
<tr>
<td>1</td>
<td>0697 40</td>
<td>Grey</td>
</tr>
<tr>
<td>1</td>
<td>0697 80</td>
<td>White</td>
</tr>
</tbody>
</table>

### Selection chart

- **Automatic on/off**
- **Manual adjustment of light level threshold and time delay via potentiometer**
- **All load 8.5 A - 240 V**

### Table

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0489 11</td>
<td>PIR wall mounted motion sensor 180° infrared detection, range 8 m Recommended fixing height: 2.5 m 3-wire with neutral IP 42 Light level threshold: 1 to 1000 lux Adjustable time delay: 5 s to 30 min Standby consumption: 0.7 W For direct surface mounting on wall Can be mounted in/on a corner using accessory Cat.No 0489 71 (p. 28)</td>
</tr>
<tr>
<td>1</td>
<td>5740 47</td>
<td>White - without neutral</td>
</tr>
<tr>
<td>1</td>
<td>5740 34</td>
<td>White - with neutral</td>
</tr>
</tbody>
</table>

### Wall mounted - Mosaic

- **PIR wall mounted motion sensor**
- **180° infrared detection, range 8 m**
- **Recommended fixing height: 1.2 m**
- **IP 41**
- **Light level threshold: 5 to 1275 lux**
- **Adjustable time delay: 5 s to 30 min**
- **Standby consumption: 0.2 W**
- **Without neutral, ideal to replace push-buttons wired to a timer**
- **The time delay settings must be the same between the sensor and the timer**

### Ceiling mounted

- **PIR ceiling motion sensor**
- **360° infrared detection, range 6 m**
- **Recommended fixing height: 2.5 m**
- **3-wire with neutral**
- **IP 41**
- **Light level threshold: 1 to 1000 lux**
- **Adjustable time delay: 5 s to 30 min**
- **Consumption: 0.4 W on standby**
- **Optimum distance between 2 sensors: 6 m**
- **Can be surface mounted on ceiling using accessory Cat.No 0488 75 (p. 28)**

---

**Pack**

- **Cat. No**

---

**Ideal for passageways**

- **Surface mounted on wall**
  - **PIR wall mounted motion sensor**
  - **180° infrared detection, range 8 m**
  - **Recommended fixing height: 2.5 m**
  - **3-wire with neutral**
  - **IP 42**
  - **Light level threshold: 1 to 1000 lux**
  - **Adjustable time delay: 5 s to 30 min**
  - **Standby consumption: 0.7 W**
  - **For direct surface mounting on wall**
  - **Can be mounted in/on a corner using accessory Cat.No 0489 71 (p. 28)**

---

**Wall mounted - Artoor**

- **PIR wall mounted motion sensors**
  - **180° infrared detection, range 8 m**
  - **Recommended fixing height: 1.2 m**
  - **IP 41**
  - **Light level threshold: 5 to 1275 lux**
  - **Adjustable time delay: 5 s to 30 min**
  - **Standby consumption: 0.2 W**

---

**Wall mounted - Mosaic**

- **PIR wall mounted motion sensor**
  - **180° infrared detection, range 8 m**
  - **Recommended fixing height: 1.2 m**
  - **IP 41**
  - **Without neutral, ideal to replace push-buttons wired to a timer**
  - **The time delay settings must be the same between the sensor and the timer**

---

**Ceiling mounted**

- **PIR wall and ceiling mounted motion sensor**
  - **360° infrared detection with directional head, range 8 m**
  - **Fixes directly to ceiling or wall (min. height: 1.70 m)**
  - **3-wire with neutral**
  - **IP 55**
  - **Light level threshold: 1 to 1000 lux**
  - **Adjustable time delay: 12 s to 16 min**
  - **Standby consumption: 0.4 W**
  - **Optimum distance between 2 sensors: 6 m**
  - **Can be surface mounted on ceiling using accessory Cat.No 0488 75 (p. 28)**
Motion sensors for 1 circuit

detection areas and load table

- **Detection areas**
  - Cat.Nos 5 740 47/34, 0 784 54/55/56 and 0 792 58/59
  - Cat.No 0 488 03
  - Cat.Nos 0 489 11/31
  - Cat.Nos 0 697 40/80

- **Load table**

<table>
<thead>
<tr>
<th>Cat.No</th>
<th>Halogen bulb</th>
<th>ELV halogen with ferromagnetic transformer</th>
<th>ELV halogen with electronic transformer</th>
<th>Fluorescent tube</th>
<th>Compact fluorescent bulb</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 740 47</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
</tr>
<tr>
<td>5 740 34</td>
<td>40 x 400 W</td>
<td>40 - 400 VA</td>
<td>40 - 400 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 489 11</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
</tr>
<tr>
<td>0 488 03</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
</tr>
<tr>
<td>0 489 31</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
</tr>
<tr>
<td>0 697 40/80</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
</tr>
</tbody>
</table>
**Lighting Management sensors for 1 circuit**
Lighting Management sensors for passageway with natural light

Check presence and natural light level continuously, switch off when there is sufficient natural light. Occupancy mode (automatic switch-on/off factory setting). Can be used with pushbutton Cat.No 0 770 40 (or illuminated pushbutton Cat.No 0 770 33) for vacancy mode (manual switch-on and manual or automatic switch-off). Precise on-site adjustment using configuration tool Cat.No 0 882 30 (p. 28).

Adjustable time delay: 5 s to 59 min. Light level threshold adjustable from 5 to 1275 lux.

---

### Ideal for passageways

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Sensor Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 488 17</td>
<td>PIR ceiling mounted Lighting Management sensors, range 20 m</td>
</tr>
<tr>
<td></td>
<td>0 488 08</td>
<td>PIR ceiling mounted Lighting Management sensors, range 360°</td>
</tr>
<tr>
<td></td>
<td>0 489 17</td>
<td>PIR ceiling mounted Lighting Management sensors, range 8 m</td>
</tr>
<tr>
<td></td>
<td>0 489 33</td>
<td>PIR ceiling mounted Lighting Management sensors, range 360°</td>
</tr>
<tr>
<td></td>
<td>0 489 32</td>
<td>PIR wall mounted Lighting Management sensors, range 180°</td>
</tr>
<tr>
<td></td>
<td>5 740 34</td>
<td>PIR flush mounted Lighting Management sensors, range 180°</td>
</tr>
</tbody>
</table>

---

### Ideal for outdoor and damp areas

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Sensor Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 489 33</td>
<td>PIR wall and ceiling mounted multi lens Lighting Management sensors, range 20 m</td>
</tr>
</tbody>
</table>

---

### Ideal for high ceiling areas

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Sensor Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 489 32</td>
<td>PIR multi lens Lighting Management sensors, range 360°</td>
</tr>
</tbody>
</table>

---

### Ideal for storage areas and restrooms

<table>
<thead>
<tr>
<th>Pack</th>
<th>Cat. No</th>
<th>Sensor Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 802 81</td>
<td>PIR wall mounted Lighting Management sensors, range 180°</td>
</tr>
<tr>
<td></td>
<td>5 740 34</td>
<td>PIR flush mounted Lighting Management sensors, range 180°</td>
</tr>
</tbody>
</table>

---

**Selection chart** p. 22  
**Load table** p. 29
Lighting Management sensors for 1 circuit

Lighting Management sensors for work areas with natural light

Check presence and light level continuously, switch off when there is sufficient natural light
Manual switch-on and manual or automatic switch-off (factory setting)
Can be used with pushbutton Cat.No 0 770 40 (or illuminated pushbutton Cat.No 0 770 33) for manual switch-on and manual or automatic switch-off

Infrared and ultrasonic motion sensors for workplaces, providing precise presence detection as soon as the wave transmitted by the sensor is modified (for example, by hand movement on a keyboard)
Precise on-site adjustment using configuration tool (p. 28)

Pack | Cat.Nos
---|---
**Ideal for work areas**
- Suitable for meeting room, classroom, open plan office, etc.
- **Ceiling mounted**
  - 360° infrared and ultrasonic detection, Ø8 m
  - 3-wire with neutral
  - Optimum distance between 2 sensors: 6 m
  - Standby consumption: 0.8 W
  - Fix directly to a false ceiling with mounting claws
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 488 75 (p. 28)
- **Dual technology ceiling mounted Lighting Management sensors**
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 489 71 (p. 28)
- **Surface mounted on wall**
  - PIR technology wall mounted Lighting Management sensors
  - 180° infrared detection, range (front) 8 m
  - Recommended fixing height: 2.5 m
  - 3-wire with neutral
  - IP 42
  - Additional 2 A contact for HVAC control based on presence data
  - Consumption: 0.4 W on standby
  - Optimum distance between 2 sensors: 10 m
  - Surface mounted on ceiling using accessory
  - Cat.No 0 489 71 (p. 28)
- **Dual technology wall mounted Lighting Management sensors**
  - 180° infrared and ultrasonic detection, range (front) 8 m
  - Recommended fixing height: 2.5 m
  - 3-wire with neutral
  - IP 42
  - Additional 2 A contact for HVAC control based on presence data
  - Consumption: 0.4 W on standby
  - Optimum distance between 2 sensors: 10 m
  - Surface mounted on ceiling using accessory
  - Cat.No 0 489 71 (p. 28)

Pack | Cat.Nos
---|---
**Ideal for offices**
- **Wall mounted**
  - 180° infrared and ultrasonic detection, range 8 m
  - Recommended fixing height: 1.20 m
  - Standby consumption: 0.2 W
  - Optimum distance between 2 sensors: 6 m
  - 3-wire cable
  - IP 41
  - For installation in box, depth 40 mm min., or in surface mounting box Cat.No 0 802 81
  - 2 modules
  - Dual technology flush mounted Lighting Management sensors
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 488 75 (p. 28)
- **Dual technology flush mounted Lighting Management sensors**
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 489 71 (p. 28)
- **Surface mounted on wall**
  - PIR ceiling mounted Lighting Management sensors
  - 360° infrared detection, Ø8 m
  - 3-wire with neutral
  - IP 41
  - For installation in box, depth 40 mm min., or in surface mounting box Cat.No 0 802 81
  - 2 modules
  - Dual technology flush mounted Lighting Management sensors
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 488 75 (p. 28)
- **Dual technology flush mounted Lighting Management sensors**
  - Connection via automatic terminals
  - Surface mounted on ceiling using accessory
  - Cat.No 0 489 71 (p. 28)
- **Without 2 A contact for HVAC control**
  - Additional 2 A contact for HVAC control based on presence data
All sensors are supplied with factory settings:
- 500 lux light level threshold for ceiling mounted sensors, 300 lux for surface and flush mounting sensors
- 15-minute time delay and walkthrough function activated
The configuration tools are used to adjust these presets and the detection sensitivity.

### Configuring settings on-site

- Step programming on preset buttons
- Digital programming to one decimal place on the digital screen
- Instant programming control
- Used to display the parameters of each sensor
- Option to store settings in the memory and to apply them to other sensors
- Standard preset configurations for each room type (office, hallway, etc.) according to EN 12 464

### Installing surface mounting boxes Cat.Nos 0 488 74/75

### Installing fixing accessories in/on a corner

(Images of sensor mounting in internal and external corners)

### Load table

<table>
<thead>
<tr>
<th>Cat.no</th>
<th>Halogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 488 20/22</td>
<td>0 488 24/30/23/25</td>
</tr>
<tr>
<td>0 784 85/86</td>
<td>+04 8 85 1</td>
</tr>
<tr>
<td>0 488 20/22</td>
<td>0 488 24/30/23/25</td>
</tr>
<tr>
<td>0 784 85/86</td>
<td>+04 8 85 2</td>
</tr>
<tr>
<td>0 488 07/08</td>
<td>20</td>
</tr>
<tr>
<td>0 488 06/09</td>
<td>20</td>
</tr>
<tr>
<td>04 8 81 7</td>
<td>20</td>
</tr>
<tr>
<td>07 8 45 3/07 9 25 3</td>
<td>40-4</td>
</tr>
<tr>
<td>07 8 45 2/07 9 25 2</td>
<td>20</td>
</tr>
<tr>
<td>04 8 91 6</td>
<td>20</td>
</tr>
<tr>
<td>04 8 91 7</td>
<td>20</td>
</tr>
<tr>
<td>04 8 93 2</td>
<td>20</td>
</tr>
<tr>
<td>04 8 93 3</td>
<td>20</td>
</tr>
</tbody>
</table>

### Accessories

- **RJ 45 connectors**
- **RJ 45 doubler**
- **Surface mounting boxes**
- **Fixing accessories for installation in/on corners**
Motion sensors and Lighting Management sensors for controllers

**Example of how Lighting Management sensors function in an office**

Deliberate switch-on action
Lighting switches off automatically when there is sufficient natural light, in accordance with standard EN 15 193
Meet the requirements of RT 2012

<table>
<thead>
<tr>
<th>Arrival: low light level</th>
<th>Strong light level</th>
<th>Fading light level</th>
<th>Departure: end of day</th>
</tr>
</thead>
<tbody>
<tr>
<td>On entering the room, the light is switched on using the pushbutton by the door</td>
<td>When someone is in the room, the sensor will turn the light off automatically if the light level threshold is reached(1)</td>
<td>When someone is in the room, the sensor turns the light back on automatically.</td>
<td>On leaving the room, the light is switched off by pressing the pushbutton. If the light is not switched off, the sensor will operate automatically.</td>
</tr>
</tbody>
</table>

1: Press the pushbutton to keep the light on

**Load table**

<table>
<thead>
<tr>
<th>Cat.No</th>
<th>Halogen bulb</th>
<th>ELV halogen with ferromagnetic transformer</th>
<th>ELV halogen with electronic transformer</th>
<th>Fluorescent tube</th>
<th>Compact fluorescent bulb</th>
<th>LED</th>
<th>Fluorescent bulb with 1-10 V ballast</th>
<th>DALI</th>
<th>Volt-free motor contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 488 20/22</td>
<td>0 488 24/30/23/25</td>
<td>0 784 85/86 + 5 488 50</td>
<td>3600 W</td>
<td>1800 VA</td>
<td>1800 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
<td>-</td>
</tr>
<tr>
<td>0 488 20/22</td>
<td>0 488 24/30/23/25</td>
<td>0 784 85/86 + 5 488 51</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>0 488 20/22</td>
<td>0 488 24/30/23/25</td>
<td>0 784 85/86 + 5 488 52</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1000 VA</td>
</tr>
<tr>
<td>0 488 04</td>
<td>0 488 06/09</td>
<td>0 488 17</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
<td>-</td>
</tr>
<tr>
<td>0 488 07/08</td>
<td>0 488 06/09</td>
<td>0 488 17</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
<td>-</td>
</tr>
<tr>
<td>0 488 04</td>
<td>0 488 06/09</td>
<td>0 488 17</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 W</td>
<td>-</td>
</tr>
<tr>
<td>0 784 53</td>
<td>0 784 72</td>
<td>0 489 33</td>
<td>2000 W</td>
<td>1000 VA</td>
<td>1000 VA</td>
<td>10 x (2 x 36 W)</td>
<td>250 W</td>
<td>250 VA</td>
<td>-</td>
</tr>
</tbody>
</table>

1: Operates with dimmable LEDs

Best practice guide for office buildings available at www.legrand.com
Lighting Management sensor for managing several circuits
multi-circuit ceiling mounted controllers for areas with natural light

Sensor and controller selection chart p. 23

Ceiling mounted or installed in Cablofil® cable trays (see Legrand Cable Management catalogue)
Connection to sensors (Cat.Nos 0 488 20/22/30/24/23/25 and 0 784 85/86) by cord or RJ 45 cable or BUS/SCS cable to be fitted with RJ 45 connector Cat.No 0 488 72 (p. 31)

Pack | Cat.Nos | For controlling 1 or 2 circuits in one room
--- | --- | ---
1 | 0 488 50 | 1 sensor input, 2 inputs for auxiliaries
--- | --- | ---
1 | 0 488 51 | 2 DALI outputs (32 ballasts max.) and 1 ventilation output (volt-free contact)
--- | --- | ---
1 | 0 488 52 | 2 x 1000 VA lighting outputs

Pack | Cat.Nos | For controlling 4 lighting circuits
--- | --- | ---
1 | 0 488 43 | 4 outputs
1 | 0 488 44 | 32 ballasts maximum per output

Pack | Cat.Nos | For controlling 2 lighting circuits, 1 shutter and 1 HVAC contact
--- | --- | ---
1 | 0 488 47 | 2 ON/OFF or 1-10 V dimming lighting outputs
1 | 0 488 45 | 2 outputs
1 | 0 488 42 | 2 outputs
1 | 0 488 41 | 2 x 16 A outputs

Pack | Cat.Nos | For controlling 2 lighting circuits
--- | --- | ---
1 | 0 488 41 | 2 x 16 A outputs
1 | 0 488 42 | 2 outputs
1 | 0 488 45 | 2 outputs
1 | 0 488 47 | 2 ON/OFF or 1-10 V dimming lighting outputs
Lighting Management sensors for managing several circuits

Lighting Management sensors for controllers for passageway and work areas with natural light

Sensor and controller selection chart p. 23

Check presence and light level continuously, switch off when there is sufficient natural light
Automatic switch-on/off (factory setting)
Precise on-site adjustment using configuration tool (p. 28)
Connect to controllers by cord or RJ 45 cable or BUS/SCS cable to be fitted with RJ 45 connector Cat.No 0 488 72 (p. 28)

Pack Cat.No

Ideal for large areas

Ceiling mounted

1 0 488 20
360° infrared detection, range 08 m
Optimum distance between 2 sensors: 6 m
Consumption: 0.2 W on standby
Fixes directly to a false ceiling with mounting claws (included) or installed in a Batibox box, depth 50 mm
Surface mounted on ceiling using accessory Cat.No 0 488 75
IP 41

1 0 488 25
140° infrared detection with directional head, range 30 m
IP 42
Consumption: 0.2 W on standby
Supplied with fixing plate

1 5 740 46
180° infrared detection, range 8 m
Recommended fixing height: 1.2 m
IP 41
Consumption: 0.2 W on standby
Integrated pushbutton
For installation in box, depth 40 mm min., or in surface mounting box Cat.No 0 802 81
2 modules

Surface mounted

1 0 488 24
180° infrared detection with directional head, range (front) 5 m
IP 42
Consumption: 0.2 W on standby
Supplied with fixing plate

1 0 488 30
270° dual infrared detection, side range 2 x 15 m and front range 10 m
IP 55
Consumption: 0.5 W on standby
Supplied with fixing plate

Ideal for outdoor and damp areas

Surface mounted

1 0 488 23
180° infrared and ultrasonic detection with directional head, range (front) 5 m
IP 42
Consumption: 0.5 W on standby
Supplied with fixing plate

Pack Cat.No

Ideal for work areas

Wall mounted

1 5 740 48
180° infrared and ultrasonic detection, range 8 m
Recommended fixing height: 1.2 m
IP 41
Consumption: 0.2 W on standby
Integrated pushbutton
For installation in box, depth 40 mm min., or in surface mounting box Cat.No 0 802 81
2 modules

1 0 488 22
360° infrared and ultrasonic detection, range 08 m
Recommended fixing height: 2.50 m
Optimum distance between 2 sensors: 6 m
Consumption: 0.5 W on standby
Fixes directly to a false ceiling with mounting claws (included) or installed in a Batibox box, depth 50 mm
Surface mounted on ceiling using accessory Cat.No 0 488 75 (p. 28)
IP 20

Surface mounted

1 0 488 23
180° infrared and ultrasonic detection with directional head, range (front) 7 m
IP 42
Consumption: 0.5 W on standby
Supplied with fixing plate

Light level measurement cell

1 0 488 28
For synchronising the light level measurement when used with sensors
Use the configuration tool Cat.No 0 882 30 (p. 28) to configure the light level cell
Connects to the BUS/SCS cable with connector Cat.No 0 488 72 (p. 28)
IP 20

RJ 45-BUS/SCS connectors

1 0 488 72
Male connector

1 0 488 73
Female connector

Local control
solutions

Connection to controller via cord or RJ 45 cable

Integrated pushbutton
Local or global control, the choice is yours!

Once you have selected your sensors and controls, you can opt for a local BUS/SCS solution or a BUS/KNX building control system.

**LOCAL CONTROL**
BUS/SCS wiring enables local and remote presence and light level detection and management, shutter control, time management and scenario management functions. Ideal for meeting rooms, small businesses or office spaces etc.

**BUILDING CONTROL**
In addition to local control, BUS/KNX wiring enables supervision and integration of other building applications, such as emergency lighting, HVAC and fire alarms. An ideal solution to the needs of energy performance, operating performance and ease of maintenance.

**RADIO/ZIGBEE®:**
THE PERFECT COMPLEMENT TO BUS/SCS

As an addition to BUS/SCS wiring, the Radio/ZigBee® offer can be used to install new radio control points without damaging walls. Ideal for refurbishment installations or glazed surfaces.

**ON/OFF lighting controls**
- Pushbutton control used to control 1 controller
  - **1 way**
    - Used to control 1 lighting circuit (1 output)
    - **0 791 75**
    - White
    - **0 791 75**
    - Aluminium
  - **2 way**
    - Used to control 2 lighting circuits (2 outputs)
    - **0 784 72**
    - White
    - **0 784 72**
    - Aluminium

**Switch multifunction controls**
- Used to control several controllers (or several outputs on one or more controllers):
  - **ON/OFF**, dimming, ventilation, roller blind
  - **1 way**
    - **0 784 71**
    - White
    - **0 784 71**
    - Aluminium
  - **2 way**
    - **0 784 73**
    - White
    - **0 784 73**
    - Aluminium

**Scenario controls**
- Used to control several controllers
  - **2 scenarios**
    - 4 buttons used to manage the start and end of each scenario
      - Example: adjusting lighting levels, controlling lighting with blind, etc.
    - **0 784 78**
    - White
    - **0 784 78**
    - Aluminium

**RADIO/ZIGBEE®:**
THE PERFECT COMPLEMENT TO BUS/SCS

As an addition to BUS/SCS wiring, the Radio/ZigBee® offer can be used to install new radio control points without damaging walls. Ideal for refurbishment installations or glazed surfaces.
As well as the lighting, optimise operating performance

For optimum energy performance and maintenance, you need active management solutions for all the equipment in the building.

With global control, Legrand becomes an active part of new generation buildings, responding to all their requirements.

ISO 50000/HQE/LEED/BREEAM/SMART GRID READY

LEGRAND
A MOTIVE FORCE IN BUILDINGS