New BMS multi-sensors for all your detection needs
The sensor specialist B.E.G. Brück Electronic GmbH offers many of its occupancy detectors now also as BMS multi-sensors in addition to the 11-48V versions.

The BMS multi-sensors offer the advantage over standard 24V multi-sensors that the 2-core DALI bus, which often exists already for the lighting, can be used.

The simplification is important: while a standard 24V multi-sensor often requires an own terminal as well as a separate supply line, a plurality of BMS sensors can be connected to one line, the number depending on the DALI power supply. DALI luminaires and DALI sensors share the bus.

The new BMS standard offers the possibility to send sensor information such as movement, occupancy and light values without cyclical query in multi-master mode. This information is standardised so that B.E.G.’s BMS multi-sensors can be used with all BMS compatible controllers.

Equipped with modern digital passive infrared sensors, the multi-sensors offer an excellent detection quality for movement and occupancy. The various multi-sensors, e.g. the small mini sensor „PICO“ with an installation depth of only 11 mm, the super-flat PD11, or the high-bay detector PD4-BMS-GH offer detection ranges of up to 44m in diameter.

Light measurement with B.E.G.’s external light sensor is very reliant, and with the PD4-BMS-GH a constant light regulation is possible up to a mounting height of 16 m.
Features
- DALI control devices developed in compliance with IEC 62386 Parts 101, 103, 303 and 304
- Lighting control takes place in a centralised BMS-capable multi-master application controller from any manufacturer
- Operating voltage via DALI bus
- Large range for a wide variety of requirements
- Bright LED indication for quick localisation
- Exterior light sensors, some are orientable
- Commissioning and maintenance by systems integrator of the installed lighting control solution

Functions
- Addressable and usable according to IEC62386 parts 101, 103, 303 and 304
- Sends LUX values if required
- Sends information about room occupancy and motion detection if required
- Integrated hold time for room occupancy detection
- Polling support
- Various light measurement methods adjustable via “Memory banks” (depending on version)
Multi-sensor PD11-BMS-FLAT-FC

- Low profile DALI multi-sensor (visible height: 0.85 mm)
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.
- Spring clips for quick and easy installation in suspended ceilings
- Includes lens shields and clamping ring for installation within luminaries.

Technical data

- **Voltage:** 10 - 22 V DC via DALI Bus
- **Dimensions:** Ø 52 x 48 mm
- **Typ. power input:** 4 mA
- **Detection area:** vertical 360°
- **Range:** max. Ø 9 m across max. Ø 6 m towards max. Ø 3 m seated
- **Degree / class of protection:** IP20 / Class II

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Code</th>
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<tbody>
<tr>
<td>Cover ring PD11 Ø 52 mm, black</td>
<td>92537</td>
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<tr>
<td>Cover ring PD11 Ø 100 mm, white</td>
<td>92692</td>
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<tr>
<td>Square design frame PD11-FC, white</td>
<td>92994</td>
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<td>In-wall mounting set 1 / PD11, white</td>
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<tr>
<td>In-wall mounting set 2 / PD11, white</td>
<td>92833</td>
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</table>
Application example: Conference room

- Group 1
  PD11-BMS-FLAT-FC

- Range walking across
- Range Seated
  (Presence detection)
Multi-sensor
PICO-BMS-FC

- Mini DALI multi-sensor (installation depth: 11 mm)
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.
- Designed for installation in luminaries and suspended lighting tracks.

Technical data

- Voltage: 10 - 22 V DC via DALI Bus
- Dimensions: Ø 33 x 27 mm
- Typ. power input: 2 mA
- Detection area: vertical 360°
- Range: max. Ø 10 m across
  max. Ø 6 m towards
  max. Ø 4 m seated
- Degree / class of protection: IP20 / Class II

PICO-BMS-FC 93924
Application example: Individual office

Group 1
PICO-BMS-FC

- Range walking across
- Range Seated
  (Presence detection)
Multi-sensor
PD2N-BMS-FC/-FM

- Medium-sized motion detection range
  - DALI multisensor
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with internal and external light sensor

Technical data
- Voltage: 10 - 22 V DC via DALI Bus
- Dimensions: FC = Ø 83 x 55 mm
  - FM = Ø 106 x 42 mm
- Typ. power input: 6 mA
- Detection area: vertical 360°
- Range:
  - max. Ø 10 m across
  - max. Ø 6 m towards
  - max. Ø 4 m seated
- Degree / class of protection: IP20 / Class II

PD2N-BMS-FC 93329
PD2N-BMS-FM 93337

Accessory

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
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<tbody>
<tr>
<td>SM Surface Mounting Set IP54</td>
<td>93307</td>
</tr>
<tr>
<td>Wire basket BSK (Ø 200 x 90 mm), white</td>
<td>92199</td>
</tr>
</tbody>
</table>
Application example: Open-plan office

- **Group 1**
  - PD2N-BMS-FC/-FM

- **Group 2 – 10**
  - PD2N-BMS-FC/-FM

- Range walking across
- Range Seated (Presence detection)
Multi-sensor PD4N-BMS

- Wide motion detection range DALI multi-sensor
- Flush fitting or surface mount versions available.
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with internal and external light sensor

Technical data

- Voltage: 10 - 22 V DC via DALI Bus
- Dimensions: Ø 106 x 74 m
- Typical power input: 7 mA
- Detection area: vertical 360°
- Range: max. Ø 24 m across, max. Ø 8 m towards, max. Ø 6.4 m seated
- Degree / class of protection: IP20 / Class II

PD4N-BMS-FC 93311

Accessory

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<td>92199</td>
</tr>
</tbody>
</table>
Application example: Underground car park

- **Group 1**
  - PD4N-BMS-FC/-FM

- **Group 2**
  - PD4N-BMS-FC/-FM

- Range walking across
- Range walking towards
Multi-sensor
PD4N-BMS-C

- Wide motion detection range DALI multi-sensor with a special lens for corridor applications
- False ceiling or surface mount version available
- Powered via DALI bus
- DALI multimaster technology according to IEC 62386 part 103
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.
- Mixed light measurement with internal and external light sensor

### Technical data

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<tr>
<th>Parameter</th>
<th>Specification</th>
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<tr>
<td>Voltage</td>
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<td>Dimensions</td>
<td>FC= Ø 106 x 68 mm</td>
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<td>Detection area</td>
<td>vertical 360°</td>
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<tr>
<td>Range</td>
<td>max. Ø 40 m across max. Ø 20 m towards</td>
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<tr>
<td>Degree / class of protection</td>
<td>IP20 / Class II</td>
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</table>

### PD4N-BMS-C-FC

93315

### Accessory

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<tr>
<td>Wire basket BSK (Ø 200 x 90 mm), white</td>
<td>92199</td>
</tr>
</tbody>
</table>
Application example: Corridor

- **Group 1**
  - PD4N-BMS-C-FC/-FM

- **Group 2**
  - PD4N-BMS-FC/-FM

- **Group 3**
  - PD4N-BMS-C-FC/-FM

- Range across

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**Group 1**

PD4N-BMS-C-FC/-FM

**Group 2**

PD4N-BMS-FC/-FM

**Group 3**

PD4N-BMS-C-FC/-FM

Range across
Multi-sensor
PD4-BMS-GH-SM

- Addressable DALI multi-sensor for surface mounting in large mounting heights
- External telescopic light sensor for a mounting height between 5 and 16m (mechanically adjustable) for measuring the light according to the application.
- Bright LED indication for commissioning
- Addressable according to IEC 62386 Part 103 (control device)
- Instance 0 provides information regarding occupancy and movement for the DALI-Bus according to IEC 62386 part 303
- Instance 1 provides LUX values for the DALI-Bus according to IEC 62386 part 304
- Parameterization is possible via mandatory Multimaster-Application-Controller. This controller must support IEC 62386 parts 101/103/303/304.

Technical data
- Voltage: 16 V DC via DALI Bus
- Typ. power input: 7 mA
- Detection area: vertical 360°
- Range: max. Ø 44 m across max. Ø 30 m towards
- Degree / class of protection: IP54 / Class II
- When used in high-bay warehouses, care should be taken that, in the cross-aisles of the warehouse, detectors are installed that can detect movement only in the desired aisle locations, by using lens shields.

PD4-BMS-GH-SM 93025

Accessory
Wire basket BSK (Ø 200 x 90 mm), white 92199
Application example: High-bay warehouse

Group 1
PD4N-BMS-FC/-FM

Group 2
PD4-BMS-GH-SM

Group 3 – 7
PD4-BMS-GH-SM with blinds

Range walking across

Range walking towards
Multifunctional light management with DALI