B.E.G. The lighting control professionals



News 2016

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Smart emergency lights –

safety using LED technology

New technology with familiar quality

The B.E.G. emergency lights are available with DALI interface and are equipped with energy-saving LEDs. This ensures a good illumination of the escape route signal. Integrated in the lights is an automatic test function for checking the battery condition and the illumination function. It is also possible to start the test function manually via remote control, DALI or using the respective button on the light itself. The integrated LED states shows any dysfunctions. Test results and disfunctions are stored and can be read out. This significantly simplifies maintenance of the emergency light.

Technical data

- Power supply: 230 V AC, 50/60 Hz
- Lighting components: permanently mounted LED board with 12 x 0.5 W LEDs
- Light colour: 6500 K daylight white
- Battery: NiMh 3,6V 800mAh (3h)/1600mAh (8h)
- Power failure buffering time: 3 hours /8 hours

Of course, European standards and regulations are consistently observed.

Thanks to the bidirectional IR equipment settings can be easily made using the B.E.G. remote control App and the IR-Adapter for Smartphones. Furthermore, it is possible to read out the settings.

The B.E.G. emergency light Diamant DT32 has a streamlined aluminium profile. The illumination of the pictogram is particularly homogeneous and effective. This emergency light meets the highest demands.

- Ambient temperature: -5 °C to +35°C
- Operating mode: Continuous/standby operation
- Monitoring: automatic self check (SC) central monitoring via DALI bus
- Bi-directional remote control (programming and readout via B.E.G. app and IR-Adapter for smartphones)







	Diamant DT32	Classic-LED	Classic-LED
Housing	Aluminium profile with plastic end caps	UV-resistant polycarbonate	UV-resistant polycarbonate
Dimensions	356 x 281 x 50 mm	359 x 163 x 90 mm	359 x 105 x 90 mm
Degree of protection/class	IP20 / I / CE	IP54 / II / CE	IP54 / II / CE
Recognition range	32 m	25 m	14 m
3 hours	6/3SC-LED Part no. 1207	2DN-H25/6/3SC-LED Part no. 1206	2DNI4/6/3SC-LED Part no. 1200
3 hours DALI	6/3DALI-LED Part no. 1210	2DN-H25/6/3DALI-LED Part no. 1215	2DNI4/6/3DALI-LED Part no. 1201
8 hours	6/8SC-LED Part no. 1211	2DN-H25/6/8SC-LED Part no. 1216	2DNI4/6/8SC-LED Part no. 1213
8 hours DALI	6/8DALI-LED Part no. 1212	2DN-H25/6/8DALI-LED Part no. 1217	2DNI4/6/8DALI-LED Part no. 1214



The new world of DALI products from B.E.G. -

DALI Compact – DALI System

LUXOMAT®

DALI - cost-efficient solutions for all sizes of buildings

Originally designed for switching and dimming lights, DALI is providing an increasing number of smart and comprehensive building automation features. Inexpensive components can be used to create compact or extendible solutions.

B.E.G.'s DALI product range is divided into "DALI Compact" products for standalone applications with group or broadcast control and "DALI System" for building, multi-room and single-room solutions.

DALI Compact

With single-master versions and isolated solutions, DALI Compact includes products that combine everything in a single housing. The DALI power supply, push button control, relay and application controller are all installed directly in the detector housing. The broadcast method and the factory presets allow the devices to be put into operation quickly.

The area to be monitored can subsequently be enlarged economically using conventional slave devices that are compatible with the DALI master devices. All settings and configurations can be made comfortably using the remote control or the B.E.G. app in conjunction with the IR-adapter for smartphones.

DALI System

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IP20

The "DALI System" product group, on the other hand, provides many individual components which can provide a wealth of features depending on individual requirements. In addition to its extremely flat PD11 detectors, B.E.G. provides all devices required for an effective lighting system including a DALI power supply unit, DALI router, DALI relay and a DALI push button interface.

In addition to the addressability and the "multi-master principle", in which components can be both transmitters and receivers, a tremendous advantage of this product line is the scalability of the system from individual rooms to controlling an entire building via DALI bus. Numerous features and settings via USB, Ethernet, LAN, Wi-Fi or Bluetooth (interface depends on the desired solution package) provide planners with increased efficiency in the planning process and reduces costs for installers during the installation process.

B.E.G. DALI functions
Occupancy-dependant switching (Auto-On / Auto-Off)
Daylight-dependant regulation (Auto-Dim)
Toggle between full and semi-automatic mode
Manual operation by conventional pushbuttons (switching or dimming)
Orientation light (dim light after main light cycle) adjustable in %
Burn-in function (100h)
Soft start (light is dimmed up "soft", instead of switched on "abrupt")
INI light (lighting ON or OFF during self-test cycle of the detector/multisensor - approx. 1 minute)
Different relay operation modes available, e.g. HVAC, cut-off, alarm, pulse
Factory setting/Reset function
Basic settings possible via potentiometer and DIP switches

DALI Compact

B.E.G.'s DALI Compact occupancy detectors combine the DALI power supply, push button control, relay and application controller in their detector housing.

Description				
PD2-M-DALI/DSI-SM	PD2-M-DALI/DSI-FC			
Part no. 92280	Part no. 92258			
PD4-M-DALI/DSI-SM	PD4-M-DALI/DSI-FC			
Part no. 92279	Part no. 92275			
PD4-M-TRIO-DALI/DSI-SM	PD4-M-TRIO-DALI/DSI-FC			
Part no. 92750	Part no. 92755			
PD9-M-DALI/DSI-FC	PD9-M-DALI/DSI-GH-FC			
Part no. 92920	Part no. 92938			
IR adapter for smartphones Part no. 92726				

Download the remote control app for free:



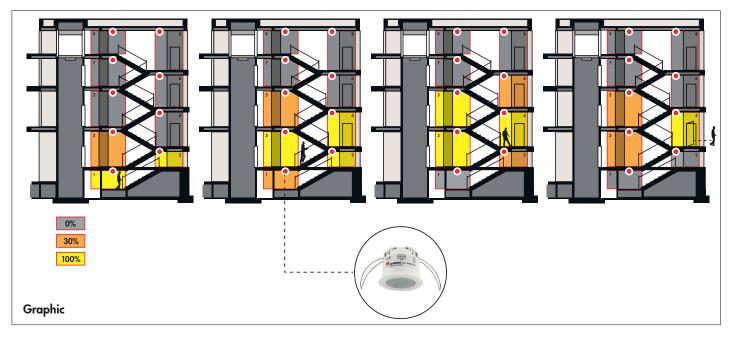
DALI System

Lighting control in all sizes of buildings, from single offices to entire building complexes, can be optimized using the DALI system. DALI occupancy detectors, DALI routers, DALI power supply unit, DALI push button and DALI relay are combined and aligned with one another to meet the requirements of each area. The free B.E.G. remote control app for iOS and Android can be used in combination with the B.E.G. IR adapter for smartphones to easily make required changes.

Special DALI Compact function					
Stand-alone / Single-Master / central intelligence (in housing)					
"All-in-One-detector - solely ceiling mounting"					
Broadcast					
For small to medium size projects with simple requirements					
Efficient commissioning process					
Conventional slave devices can be used					
DALI power supply is built in detector's housing					
Push button inputs are built in detector's housing					
Relay is built in detector's housing					
Parametrization via IR-Adapter for smartphones and app (Android/iOS)					

Image: Construction of the construc	Pass Pass			Group 22842 LUXOMAT*er PBM-DALISYS-4W P P
PS-DALISYS-USB-REG Part no. 92843 57 x 71 x 89 mm	ROUTER-DALISYS-REG Part no. 92850 60 x 71 x 89 mm	PD11-DALISYS-FLAT Part no. 92731 52 x 48 mm	RM-DALISYS-1C-REG Part no. 92849 63 x 18 x 85 mm	PBM-DALISYS-4W Part no. 92842 38 x 38 x 12 mm
 DALI power supply unit with integrated USB interface for DIN-rail mounting Integrated application controller for addres- sing up to 64 DALI subscribers 	 DALI router with an integrated web server for DIN-rail mounting 1 to 4 DALI lines (via USB and B.E.G LUXOMAT®net PS-DALISYS-USB-REG) 	 Especially flat DALI multi-sensor with only 0.85 mm of visible thickness Detection range: Ø 9 m across, Ø 6 m frontal, Ø 3 m seated 	 DALI relay module with a switching channel for DIN-rail mounting Powerful potential-free relay (dry contact) with high inrush current resistance (800A/200µs) 	 Binary DALI input device for use in 60 mm flush-mounted boxes 4 freely configurable inputs for potential-free push button and switch contacts

Guided light feature



Application example: stairwell with guided light feature

Tip: Do not define short addresses when planning a DALI-multi-master solution, but create placeholders in the plan if needed, where short addresses can be entered subsequently. This allows for allocation by the integrators/installers or a software using automatic addressing. Groups, however, should already be defined in the majority of cases during lighting design. The advantages of this are explained in the next section.







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Networked DALI lighting control –

The ultra slim PD11-DALISYS

Powerful in a modern design

The LUXOMAT®net PD11-DALISYS-FLAT is an especially flat, addressable, multi-master DALI occupancy detector for unobtrusive use in false ceilings or ceiling outlet / flush-mounted boxes.

The occupancy detector is integrated smoothly in the scalable B.E.G. LUXOMAT®net DALI System and can act as a master or slave as needed. Up to eight PD11-DALISYS-FLAT detectors can be connected on a single DALI line.

Motion detection signals and/or light values are transmitted via a data protocol, which can be processed either using other devices of the same model or higher-level controls such as KNX and BAC-NET. In addition to this, the full automatic, semi-automatic or dimmer switch operation can be activated either with or without daylight-dependent control.

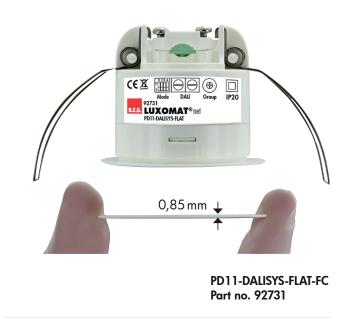
The control circuit for the daylight-dependent control can be connected with a further DALI group using the offset procedure. In addition to this, it is possible to connect the detector's main or guide lighting depending on motion detection in other groups.

A multi-master capable DALI push button module (PBM-DALISYS-4W) is available for manual control using conventional wall switches, the direct commands of which are automatically detected and carried out by the lighting components.

Technical data

- Power supply: 10 22 V vom DALI-Bus
- Current consumption: ca. 7mA
- 360° detection area
- Protection degree: IP20 / Class II / CE
- Dimensions:: Ø 52 x H 43 mm
- Factory setting: 500 Lux; 10 min follow-up time
- Settings of basic functionality via dip switch and HEX potentiometer
- All settings can be made using the free PC tool or Bluetooth smartphone app





Flush-mounted adapter set for PD11 - Part no. 92833

- For flush-mounted installation of PD11 in concrete ceilings
- Suitable for all standard cavity wall and ceiling outlet boxes (45-88 mm hole distance)
- Fast and safe insertion of the PD11 occupancy detector without spring terminals





Functionally revised hardware and software 6.0

The new generation of KNX occupancy detectors

Even more features

The new KNX detector generation 6.0 is equipped with entirely revised hardware and software and can thus be used to meet a wider range of individual requirements. The new hardware allows for a significantly reduced installation depth, which is extremely helpful when installation space is restricted, as is the case in false ceilings for example. In addition to this, the B.E.G. KNX 6.0 detectors can optionally be provided with an integrated microphone, a temperature sensor and, for the indoor 140-L wall switch, with LEDs for orientation and nightlight function. B.E.G.'s KNX detectors have a rich feature set that is unique on the market. Brand new functions in version 6.0 include software control of the individual motion sensors, integrated offset control for different levels of brightness in a room and the fully integrated logic module for complex connections. The detectors can be programmed and read out using the appropriate remote control and the buttons for special functions can be programmed as needed.

New hardware

- Optimized lighting control with internal and external light sensors*
- Acoustic sensor*
- Temperature measurement*
- Significantly reduced installation depth
- Programming and readout of parameters using the bi-directional smartphone app*

*depending on version

New software

- Sensor sensitivity individually adjustable
- Logic module
- Presence simulation
- Night light function*
- Offset switching and control mode





Reliable and simple system integration

The new LON occupancy detectors

Reliable detection using LON technology

The new B.E.G. LON occupancy detectors with an integrated light sensor for daylight-dependent lighting control has been designed for use with the future-proof and established LON bus building technology. In addition to the sensor component, these remotecontrolled occupancy detectors include the FT5000 LON transceiver and the FT-X3 LON transformer. The required easy-to-integrate software is available for download on the B.E.G. homepage.

The optional IR-PD-LON remote control unit can be used to set dimmable brightness values, HVAC configurations and save up to three scenes for reuse. Furthermore, it is possible to remotely control up to three distal actuators, e.g. roller shutter actuators. The detectors can also be remotely controlled using the B.E.G. app and the IR-Adapter for Smartphones. Both detectors are multifunctional and can be integrated individually in LON-systems.



Technical data

Power supply: 24 V AC / DC +/- 20 %

business and meeting rooms, training rooms or halls

- 360° detection area
- Protection degree: IP20 / Class II
- Ambient temperature: +5 °C +50 °C
- Easy interface to HVAC systems

- Full- or semi-automatic mode
- Switching or constant lighting control
- All configuration properties can be set using network variables
- Remote control-capable



Invisible and temperature-independent

The new (HF) microwave detector generation

HF microwave motion detector with light sensor

HF radar motion detectors can detect motion through many materials such as wood, lightweight walls or glass, and can therefore be concealed in lighting fixtures or behind wall surfaces. In order to achieve daylight-dependent lighting control, B.E.G. has equipped the new HF-MD3 and HF-MD4 microwave detectors with lighting sensors. The external light sensors (optional with HF-MD3) can be placed in the appropriate locations (e.g. at the workstation, where the most light is needed), while the power element is placed close to the lights,

for example. In addition to the external light sensor, the HF-MD4 has an external HF microwave sensor, which can be concealed in the switch box near the door, for example.



HF-MD4

- Optimum and individual alignment using external light sensor and external HF microwave sensor
- Fast connection of power element with light sensor and radar sensor using plug contacts
- Convenient programming using the B.E.G. smartphone app

Technical data

- Power supply: 110-240 V AC, 50/60 Hz
- 360° detection area

2.5 m

1 m

5m

7 m

- Protection degree: IP20 / Class II
- Ambient temperature: +5 °C +50 °C
- Dimensions: 121 x 40 x 60 mm



HF-MD3

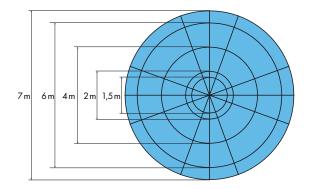
- Light sensor integrated in the housing
- Adjustable via potentiometer on the device
- External light sensor sold separately
- With optional light sensor, also remote-controlled using the B.E.G. smartphone app

Technical data

- Power supply: 110-240 V AC, 50/60 Hz
- 360° detection area
- Protection degree: IP20 / Class II
- Ambient temperature: +5 °C +50 °C
- Dimensions: 121 x 40 x 60 mm



HF-MD3 Part no. 94437



10 m



The occupancy detector that not only switches and dims lighting,

but also provides light itself.

Motion detection combined with orientation lighting

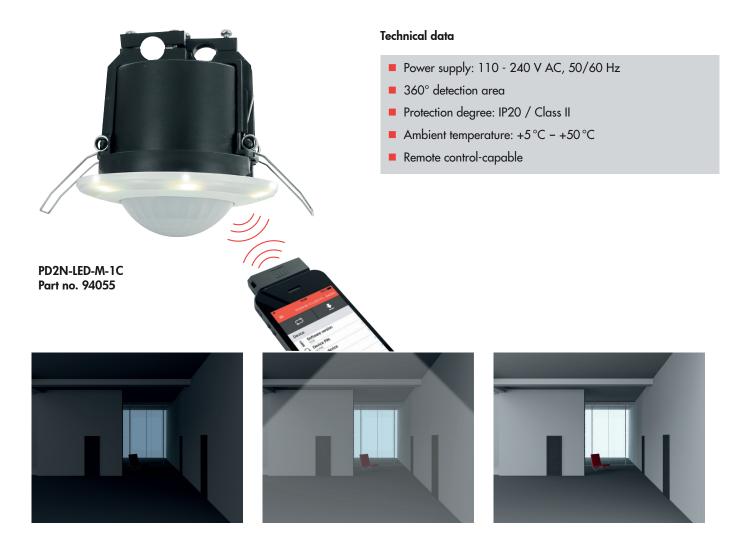
For the first time, the functionality of a ceiling occupancy detector is being combined with LED orientation lighting in a single housing with this new development. The LED orientation lighting is designed here as an illuminated ring around the sensor lens. After automatic switch-off of the main light, the orientation light is activated for an adjustable time or even permanently.

The occupancy detector with a detection range of 10 m provides a variety of options for individual adaptation to the local conditions in addition to the integrated daylight control.

All parameters can be set to values suitable to individual needs and read out via smartphone using the B.E.G. remote control app in combination with the IR adapter.

To extend the occupancy detector's range,

it can simply be connected to additional slave devices. The combination of guide lighting and automatic lighting control provides a considerable increase in comfort and energy savings.



Application example

If the light is switched on in a dark room, your eyes have to suddenly get accustomed to the light. It is much more pleasant, if the orientation light is already active in the room. The energysaving LEDs provide for soft light in this regard. The PD2N-LED-M-1C detector provides two ways to activate the main light: it is either activated when motion is detected (fully automated mode) or it has to be consciously activated using a wall switch when entering the room (semi-automatic mode).



Energy-efficient, stable and powerful

Moisture-proof LED linear luminaire

High protection rating - reliable detection

The sturdy IP65 housing of B.E.G.'s new moisture-proof LED luminaires is equipped with stainless steel caps and an opal cover. The cover prevents glare from the powerful LEDs. With power consumption of only 35 W, LEDs provide a luminous flux of 4400 lm and thus provide an alternative to fluorescent lamps up to 58 W.

AL60-LEDN

- Can be connected to lights with occupancy detectors
- Up to 10 lights per one light with sensor

AL60-LEDN Part no. 91746

AL60-LEDN-PD9/M

- incl. either mini occupancy detector PD9-M or motion detector PD9
- IP65 due to innovative special cover
- large detection range
- Programming with required remote control

AL60-LEDN-PD9M Part no. 91751 AL60-LEDN-PD9 Part no. 91748



AL60-LEDN-HF

- incl. (HF) radar detector
- temperature-independent detection
- Large-scale detection

AL60-LEDN-HF Part no. 91747

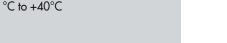
Technical data

- Power supply: 230 V AC +/- 10 % 50 / 60 Hz
- Housing: impact-resistant polycarbonate, LED board on aluminium mounting plate
- Dimensions:: 356 x 281 x 50 mm
- Lighting components: permanently mounted LED board

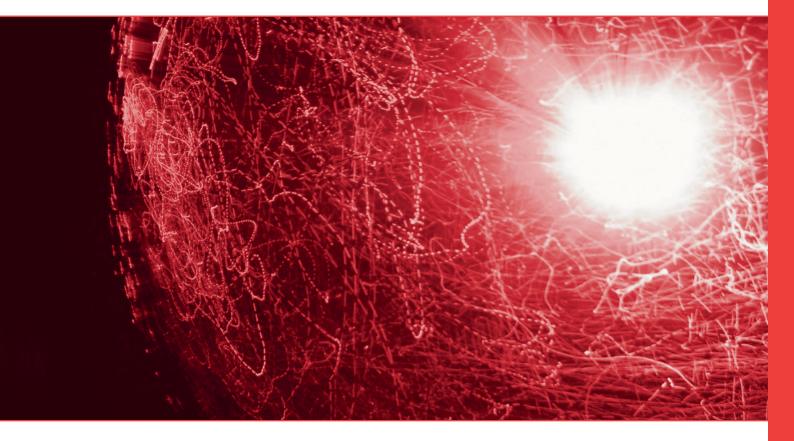
High-quality LEDs and drivers, as well as the solid mounting plate, which prevents overheating of the LEDs, ensure extreme durability.

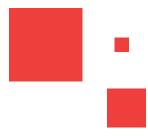


- Light colour: ~4000 K neutral white Lighting current LED: 4400 lm Lighting current lamp: 3900 lm
- Protection class / degree: IP65 / I / CE
- Ambient temperature: -20 °C to +40°C









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