

# Presence detector P48MR, DALI-2, master, 12 – 13 m, for flush mounting (SnapFit), Wieland gesis® 2 x 2 m cable with 5-pol. connectors

353-651421-4

4 year warranty

This flat and discrete presence detector is a DALI-2 master for DALI lighting control in up to four zones. It can be controlled wirelessly by push buttons. The detector settings can be modified using the Niko detector tool app and 2-way Bluetooth® communication. The Snapfit mounting system guarantees fast and stable installation. Moreover, the detector is prewired with cables and 5-pole female connectors that are each unique, which helps to avoid installation errors and save time.

Use the P48 detector's internal relay in combination with a distribution box (353-7080X) to enable the following lighting control functions:

- HVAC control in combination with distribution box 353-70801 to accommodate the integration of HVAC systems
- Control of non-dimmable ON/OFF lighting with distribution box 353-70802
- Standby minimisation of luminaires in combination with distribution box 353-70803 to save energy
- Control of non-dimmable luminaires externally on the DALI-bus with distribution box 353-70806

The range can be extended with up to ten P46 DALI-2 secondary detectors with a 2 meter cable and a connector. Mind the maximum guaranteed current on the DALI-bus.

These solutions are mainly suitable for offices, classrooms, conference rooms and meeting rooms. Lighting control can be overridden with 230 V push buttons. Use distribution box 353-70804 to divide the power distribution to the DALI luminaires over two circuit breakers and achieve a higher security of supply.

Compatible secondary detectors: 353-651021-3, 353-751021-3

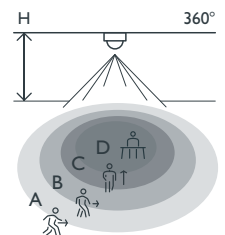
Compatible controls: 170-00005, 170-00015, 170-70015, 170-70005, 360-21001

- Flat and discrete design
- Lighting control in up to 4 zones (daylight controlled)
- Lighting zones can be controlled wirelessly by push buttons
- SnapFit mounting bracket for easy and stable mounting
- Quick cabling using screwless and easily accessible plug-in terminals
- Commissioning using app (iOS/Android) and 2-way Bluetooth® communication
- Supports DALI broadcast (default) and DALI addressable (up to 64 devices)
- Pre-configured functions:
  - adjustable PIR sensitivity (4 levels)
  - auto configuration / orientation light / night mode
  - light scenarios – define and control up to 16 light scenarios
  - wireless communication master-to-master enabling: folding door, lighting control in adjacent areas, unlimited DALI devices ( > 64 DALI devices)
  - multi zone for (smart) board lighting

wieland



## Detection range



| H     | A Walking | B Across | C Towards | D Presence |
|-------|-----------|----------|-----------|------------|
| 2.5 m | ø 13 m    | ø 11 m   | ø 3 m     | ø 5 m      |
| 3.0 m | ø 12 m    | ø 12 m   | ø 3 m     | ø 5 m      |

Measured according to EN/IEC6180



Bluetooth



DALI-2



master



360°



ø 12 m from  
a height of  
3 m



2 – 3.5 m



flush-  
mounting  
(SnapFit)

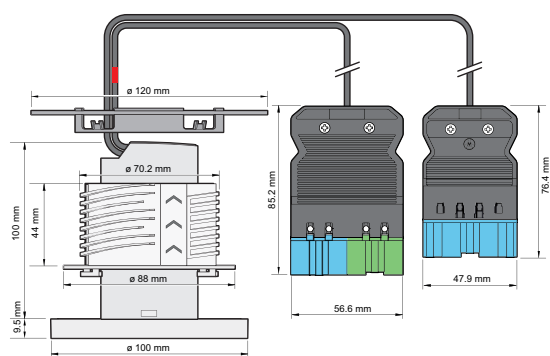
**niko**

- tunable white using integrated presets or third-party integration
- human centric lighting (24 presets)
- output relay - control HVAC / standby minimization / light (On/Off)
- external relay for HVAC / standby minimization / light (On/Off)
- adjustable turn-on level when daylight control is disabled
- event log keeps track of recent changes
- DALI lighting control can be overridden with a 230 V push button - different options available
- External DALI-2 input devices via DALI bus - up to 64 devices
- External trigger can be connected e.g. security alarm
- Web based portal solution for backing up and exchanging configuration files
- Settings and configuration can be locked with a PIN code
- Suitable for BMS integration

## Technical data

|  |  |
|--|--|
| Article number   | 353-651421-4   |
| Compatible secondary detectors                                 | 353-651021-3, 353-751021-3   |
| Compatible controls  | 170-00005, 170-00015, 170-70015, 170-70005, 360-21001  |
| Input voltage  | 230 Vac $\pm$ 10 %, 50 Hz  |
| Detector output  | DALI Broadcast/DALI Addressable  |
| Maximum power consumption                                      | 0.6 W  |
| Maximum power consumption wireless link active                 | 0.65 W   |
| Maximum MCB rating   | 16 A (limited by national installation rules)  |
| Short circuit behaviour shutdown trigger                       | voltage below 12 V, exceeding 1.3 s  |
| Short circuit behaviour restart period                         | every 14 s until success   |
| Maximum voltage on the DALI bus                                | 15 Vdc   |
| Maximum guaranteed current on the DALI bus                     | 200 mA   |
| Maximum supply current   | 250 mA   |
| Maximum startup time DALI                                      | < 1200 ms  |
| Maximum PIR detection startup time                             | 1 min 10 s   |
| Relay contact  | N.O. (max. 10 A), potential-free   |
| Maximum load incandescent and halogen lamps ( $\cos\phi = 1$ ) | 2300 W   |
| Maximum load fluorescent lamps ( $\cos\phi \geq 0.5$ )         | 1200 VA  |
| Maximum load economy lamps (CFLi)                              | 350 W  |
| Maximum load LED lamps 230 V                                   | 350 W  |
| Maximum load LED driver  | 500 VA   |
| Maximum load electronic transformer                            | 500 VA   |
| Maximum capacitive load  | 140 $\mu$ F  |
| Maximum switching current                                      | 165 A/20 ms – 800 A/200 $\mu$ s  |
| Light intensity range  | 20 lux – 2000 lux, $\infty$  |
| Number of channels   | 1 channel  |
| Maximum number of control gear on the DALI bus                 | 64   |
| Maximum number of dimmable zones                               | 4  |
| Switch-off delay   | pulse, 20 s – 2 h, $\infty$  |
| Detection angle  | 360°   |
| Detection range (PIR)  | $\varnothing$ 12 m from a height of 3 m  |
| Ambient temperature  | -25 – +40 °C   |
| Mounting method  | flush-mounting (SnapFit)   |
| Mounting height  | 2 – 3.5 m  |
| Drill diameter   | 76 mm  |
| Minimum flush-mounting depth                                   | 100 mm   |
| Maximum range Bluetooth® (free field, depending on the device) | 50 m   |
| Operating frequency  | 2.4 GHz  |
| Maximum radio frequency power                                  | -2 dBm   |
| Protection degree  | IP20   |
| Impact resistance  | IK02   |
| Modification of settings                                       | Niko detector tool app (iOS-Android) and 2-way Bluetooth® communication  |
| Halogen-free   | yes  |
| Marking  | CE   |
| Cable specifications   | – cable colour wire 1: black<br>– cable colour wire 2: black with red shrink tube<br>– length: 2 m<br>– wire cross section: 1,5 mm <sup>2</sup><br>– voltage: 250 V<br>– rated current: 16 A<br>– halogen-free: yes<br>– ambient temperature: -5 – +70C°<br>– type of connector cable 1: male, 5-pole, blue<br>– type of connector cable 2: male, 6-pole, blue/green |

## Dimensions



## Wiring diagram

