

# Presence detector P48LR, DALI-2, master, 32 – 37 m, for flush mounting (SnapFit), Wieland gesis® 2 m cable with 5-pol. connector

353-751421-3

4 year warranty

This 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 a cable and a 5-pole female connector that is unique, which helps to avoid installation errors and save time.

Use this P48 detector to enable the following lighting control functions in hallways, corridors, offices, classrooms and meeting rooms:

- Human Centric Lighting (HCL)
- tunable white
- four dimmable zones/light circuits
- light scenarios
- control of non-dimmable luminaires externally on the DALI bus with distribution box 353-70806
- multi-zone for a board light/smart board
- master/master link for adjacent areas control

The range can be extended with up to ten P47 DALI-2 secondary detectors with a 2 meter cable and connector. Mind the maximum guaranteed current on the DALI-bus.

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

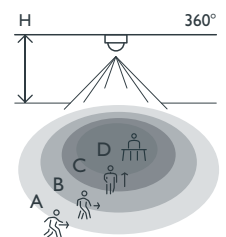
Compatible controls: 170-00005, 170-00015, 170-70015, 170-70005, 360-21001

- Lighting control in up to 4 zones (daylight controlled)
- SnapFit mounting bracket for easy and stable mounting
- Lighting zones can be controlled wirelessly by push buttons
- 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:
  - 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 number of DALI devices ( > 64 DALI devices)
  - multi zone for (smart) board lighting
  - 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

wieland



## Detection range



H	A Walking	B Across	C Towards	D Presence
2.5 m	ø 32 m	ø 28 m	ø 10 m	ø 8 m
3.0 m	ø 37 m	ø 30 m	ø 8 m	ø 4 m

Measured according to EN/IEC63180



Bluetooth



DALI-2



master



360°



ø 37 m from  
a height of  
3 m



2 – 3.5 m



flush-  
mounting  
(SnapFit)

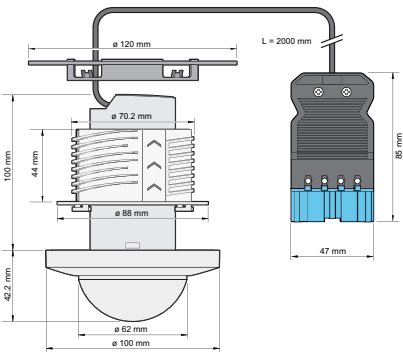
**niko**

- adjustable PIR sensitivity (5 levels incl. disable) in 3 x 120°
- 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	353-751421-3
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)	$\varnothing$ 37 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	IK04
Modification of settings	Niko detector tool app (iOS-Android) and 2-way Bluetooth® communication
Halogen-free	yes
Marking	CE
Cable specifications	– cable colour: black
	– length: 2 m
	– wire cross-section: 1,5 mm <sup>2</sup>
	– voltage: 250 V
	– rated current: 16 A
	– halogen-free: yes
	– ambient temperature: -5 – +70C°
	– type of connector: male, 5-pole, blue

Dimensions



Wiring diagram

