

# Presence detector P48LR, DALI-2, master, 32-37 m, for flush mounting (SnapFit), WAGO WINSTA® MIDI 2 x 2 m cable with 5-pol. connectors, white

353-751421-2

4 year warranty

This presence detector is a DALI-2 master for DALI lighting control in up to four dimmable zones. Lighting control can be overridden either via wireless and battery-free Bluetooth® push buttons or via 230 V 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. The detector is premounted with 2 cables and 5-pole female connectors that are each unique, which helps to avoid installation errors and save time. The P48 DALI-2 master detector enables the following lighting control solutions in hallways, corridors, offices, classrooms and meeting rooms:

- Human Centric Lighting (HCL)
- tunable white
- scenarios
- multi-zone for a board light/smart board
- wireless master/master link for adjacent areas control

Use the DALI-2 master 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 DALI 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 detection range can be extended with P46 DALI-2 secondary detectors with a 2 meter cable and a 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.



Finishing colour: white


Compatible secondary detectors: 353-651021 -1, 353-751021 -1


Compatible controls: 360-21001


This article is protected by at least one patent (application). For more info on patents, see [www.niko.eu/innovation](http://www.niko.eu/innovation).


- 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:


 


 DALI-2

 master

 360°

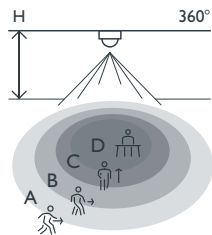
 ø 37 mm from a height of 3 m





 2 – 3.5 m

 flush-mounting (SnapFit)



## 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 5 m
3.5 m	ø 48 m	ø 42 m	ø 8 m	ø 6 m

Measured according to EN/IEC63180



**niko**

- 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
- 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

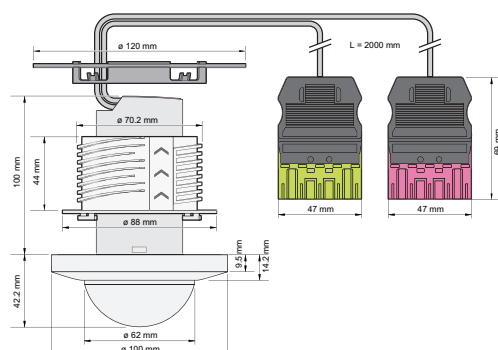
Article number	353-751421 -2
Compatible secondary detectors	353-651021 -1, 353-751021 -1
Compatible controls	360-21001
Configuration	master
Input voltage	230 Vac $\pm$ 10 %, 50 Hz
Detector output	DALI Broadcast/DALI Addressable
Maximum power consumption	0.6 W
Maximum power consumption wireless link active	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 fluorescent lamps ( $\cos\phi \geq 0.9$ )	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, $\infty$
Maximum number of secondary detectors	5
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
Colour	white (approximately RAL 9010)
Dimensions visible (HxWxD)	100 x 100 x 42.2 mm
Dimensions (HxWxD)	100 x 100 x 142.2 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	<ul style="list-style-type: none"> <li>– cable colour: grey</li> <li>– length: 2 m</li> <li>– wire cross section: 1,5 mm<sup>2</sup></li> <li>– voltage: 400 V</li> <li>– rated current: 16 A</li> <li>– halogen-free: yes</li> <li>– ambient temperature: -5 – +40C°</li> <li>– type of connector cable 1: male, 5-pole, light green</li> <li>– type of connector cable 2: male, 5-pole, pink</li> </ul>

## Accessories

353-999879	Lens cover for P4XLR, M4XLR and M4XHC detectors transparent (5 pieces)
353-991992	Deco ring for flush-mounted P4XLR and M4XLR detectors, black
353-991901	Spring clips for flush-mounted P4XMR, P4XLR, M4XMR and M4XLR detectors (SnapFit)

## Dimensions



## Wiring diagram

