DALI-2 PIR Motion Sensor for Track System

HIR61/TK
DALI-2

HYTRONIK ®

Product Description

HIR61/TK is a DALI-2 PIR motion sensor for the DALI track system, with 3-phase dial and works as DALI input device, no PSU integrated. The installation only requires simple insertion into the track. It is embedded with a DALI-2 module, PIR sensor, and daylight sensor. The surprisingly super-mini size and needless wiring bring more convenience to use, it is ideal for both commercial and domestic track light projects.

Hardware Features

2-in-1: PIR motion sensor + Daylight sensor

Super compact mini size

5-year warranty

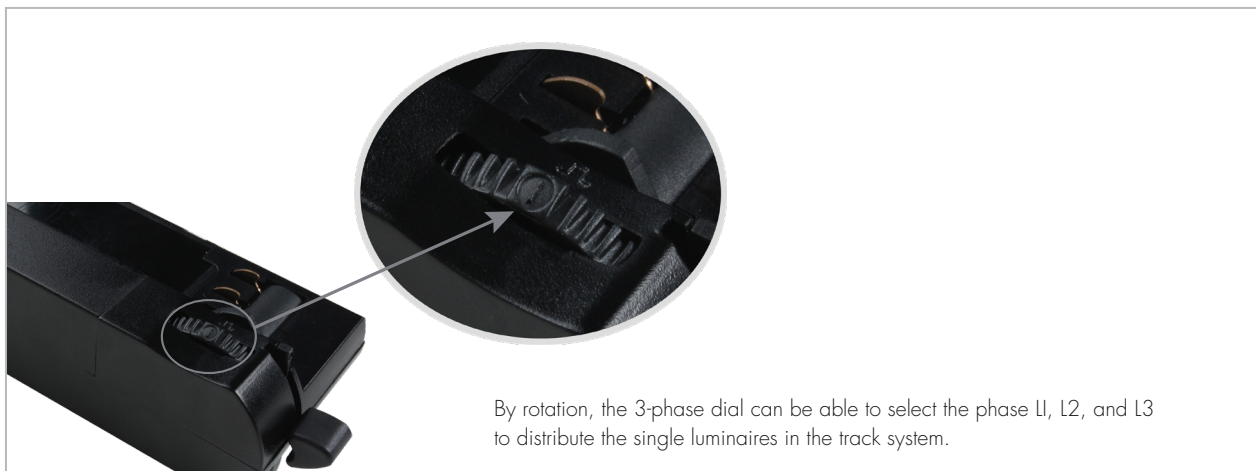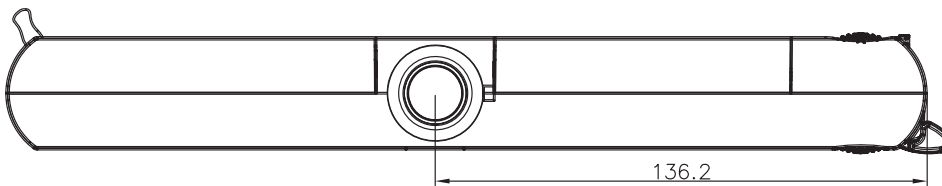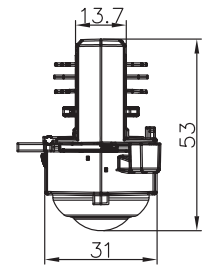Compliant to standard IEC62386_101, 103, 303, 304, 351
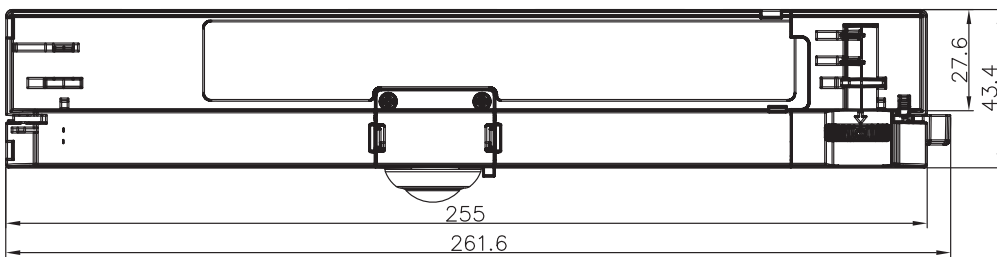
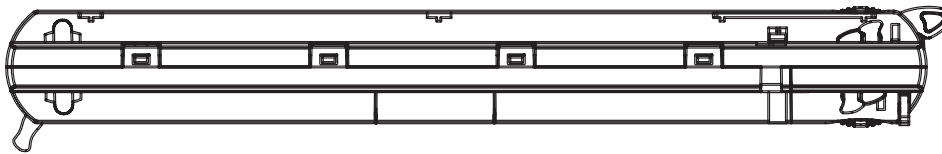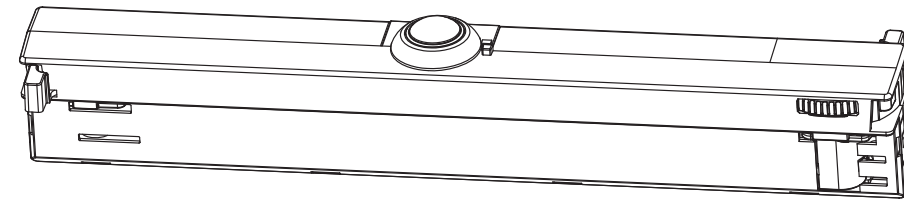## Technical Specifications

PIR Sensor Properties	
Sensor principle	PIR detection
Operation voltage	9.5~22.5VDC
Consumption current	Max. 10 mA (no LED) Max. 11 mA (with LED)
Detection range *	Max installation height: 3m Max detection range (Ø): 12m
Lux reading range	< 1000 lux
Detection angle	360°
Warming-up	5s

Environment	
Operation temperature	Ta: -20°C ~ 50°C
Storage temperature	-40°C ~ +70°C
Relative humidity	10 ~ 90%
IP rating	IP20

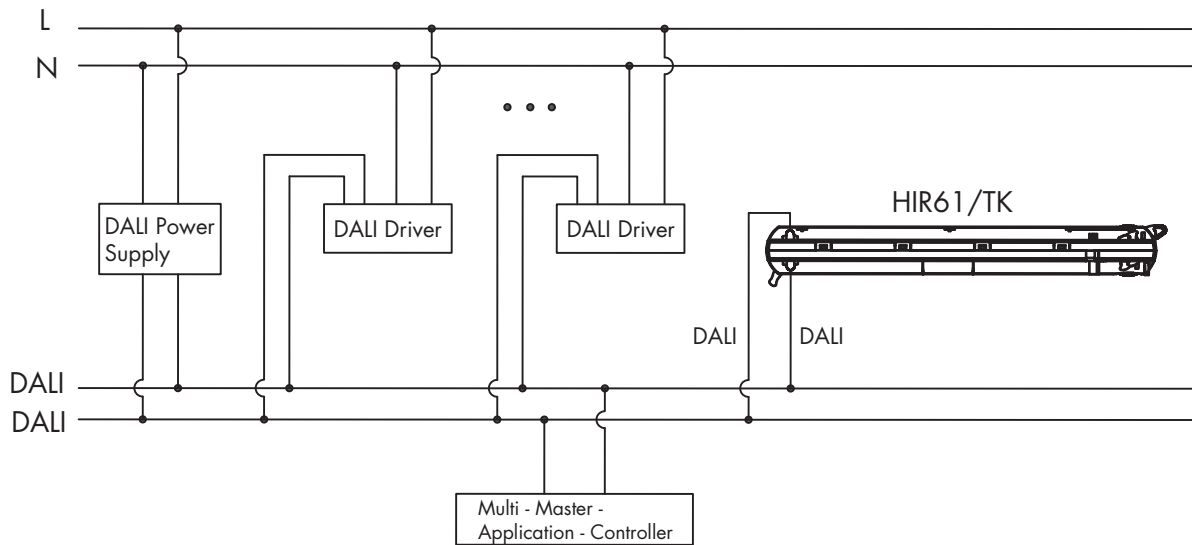| Safety & EMC	
CE	EN55015, EN61547, EN61000-3-2/-3-3, EN62386-101/103, EN62386-303/304,

* The detection range is heavily influenced by sensor placement (angle) and different walking paces. It may be reduced under certain conditions.

Mechanical Structure & Dimensions

27.6

43.4

255

261.6

13.7

53

31

136.2

By rotation, the 3-phase dial can be able to select the phase LI, L2, and L3 to distribute the single luminaires in the track system.
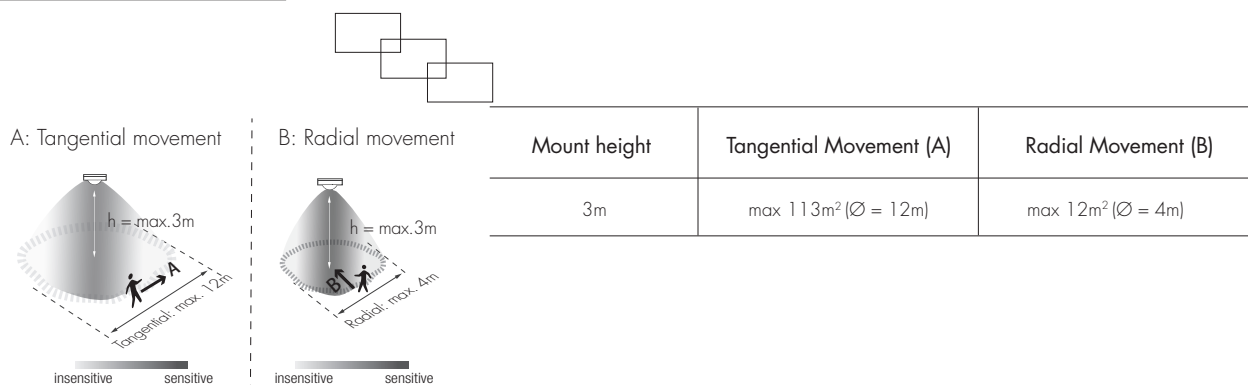
Wiring Diagram

Note: HIR61/TK has been used as DALI-2 input device to only report DALI instance (light sensor instance and motion sensor instance) to DALI-2 application controller, who is the "main brain" to process the data communication between input devices and the control gear and assign different function.

Detection Pattern

The data below is tested under following conditions:

- Single person walking;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature Ta = 20°C;
- The testing is conducted in an open and spacious indoor field, without noticeable obstacles or influences that may affect PIR performances.

A: Tangential movement

B: Radial movement

Mount height	Tangential Movement (A)	Radial Movement (B)
3m	max 113m² (Ø = 12m)	max 12m² (Ø = 4m)

Additional Information / Documents

1. Regarding precautions for PIR Sensors installation and operation, please kindly refer to
   www.hytronik.com/download ->knowledge ->PIR Sensors - Precautions for Product Installation and Operation

2. Regarding Hytronik standard guarantee policy, please refer to
   www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy