

Product Description

HC038V/BT/IG is a INGY 0/1-10V control base whereas HCD038/BT/IG is a INGY DALI control base with 30mA DALI power supply built in. They work with a wide range of microwave and PIR sensor heads. They are ideal for plastic luminaires as compared to metal luminaires because INGY signal can transmit through plastic. They are suitable for any typical indoor applications such as office, classroom, car park, warehouse and other commercial/industrial areas. With INGY wireless mesh networking, it makes communication much easier without any hardwiring, which eventually adds values to luminaires and saves costs for projects.





HC038V/BT/IG







HCD038/BT/IG

App Features

-  Grouping luminaires via mesh network
 - Two levels: room & group
 - Synchronization control
-  scene options to set up:
 - Generic Scenes
 - Lux ON/OFF Scenes
 - Tri-level control
 - Daylight Harvest
-  Detailed motion sensor settings
-  Schedule to run scenes based on time and date
-  Astro timer (sunrise and sunset)
-  Neighbouring function
-  Commissioning without internet connection possible
-  Internet-of-Things (IoT) featured: Asset tracking, indoor navigation, sensor data transmission
 - Dali addressing
 - Unlimited network size
 - Unlimited group size
 - Emergency lighting
 - Gateway-less operation
 - AES-256 encryption
-  Network sharing via QR code or keycode
-  Interoperability with INGY product portfolio
-  Compatible with EnOcean range of wireless switches
-  Device firmware update over-the-air (OTA)
-  Continuous development in progress...

Hardware Features

-  HC038V/BT/IG: 0/1-10V output :
 - 400VA (capacitive)
 - 800W (resistive)
-  HCD038/BT/IG: 30mA DALI output for up to 15 LED drivers
-  Plug'n'Play for flexible installation and cost saving assemble
-  5-year warranty



EnOcean
Self-powered IoT

Fully support
EnOcean switch
EWSSB/EWSDB

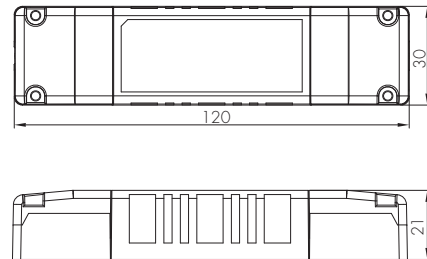
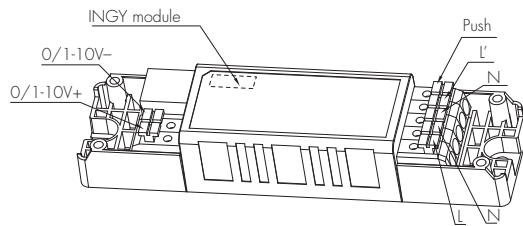
Technical Specifications (HC038V/BT/IGHCD038/BT/IG)

INGY Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	4 dBm
Range (Typical indoor)	10~30m
Protocol	INGY
Safety & EMC	
EMC standard (EMC)	EN55015, EN61000, EN61547
Safety standard (LVD)	EN60669-1, EN60669-2-1
RED	EN300328, EN301489-1/-17
Certification	Semko, CB, CE, EMC, RED, RCM

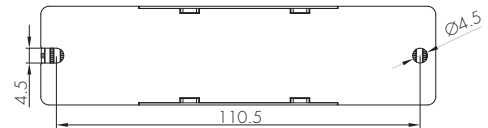
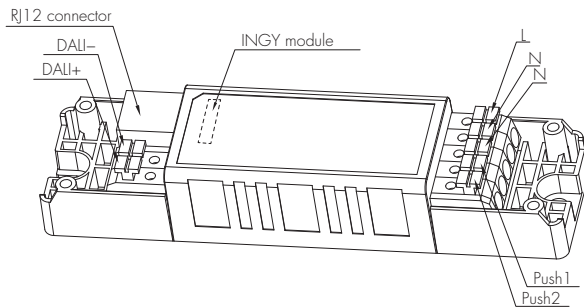
Input & Output Characteristics	
Operating voltage	220~240VAC 50/60Hz
Stand-by power	<1W
Load ratings: HC038V/BT/IG HCD038/BT/IG	Capacitive: 400W; Resistive: 800W 30mA (max. 15 devices)
Warming-up	20s
Environment	
Operation temperature	T _a : -20°C ~ +55°C
Case temperature (Max.)	T _c : +75°C
IP rating	IP20

Mechanical Structure & Dimensions

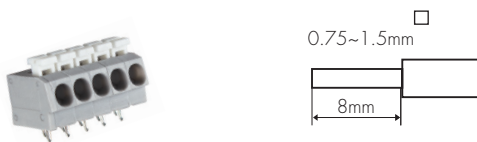
HC038V/BT/IG (0/1-10V output)



HCD038/BT/IG (DALI output)

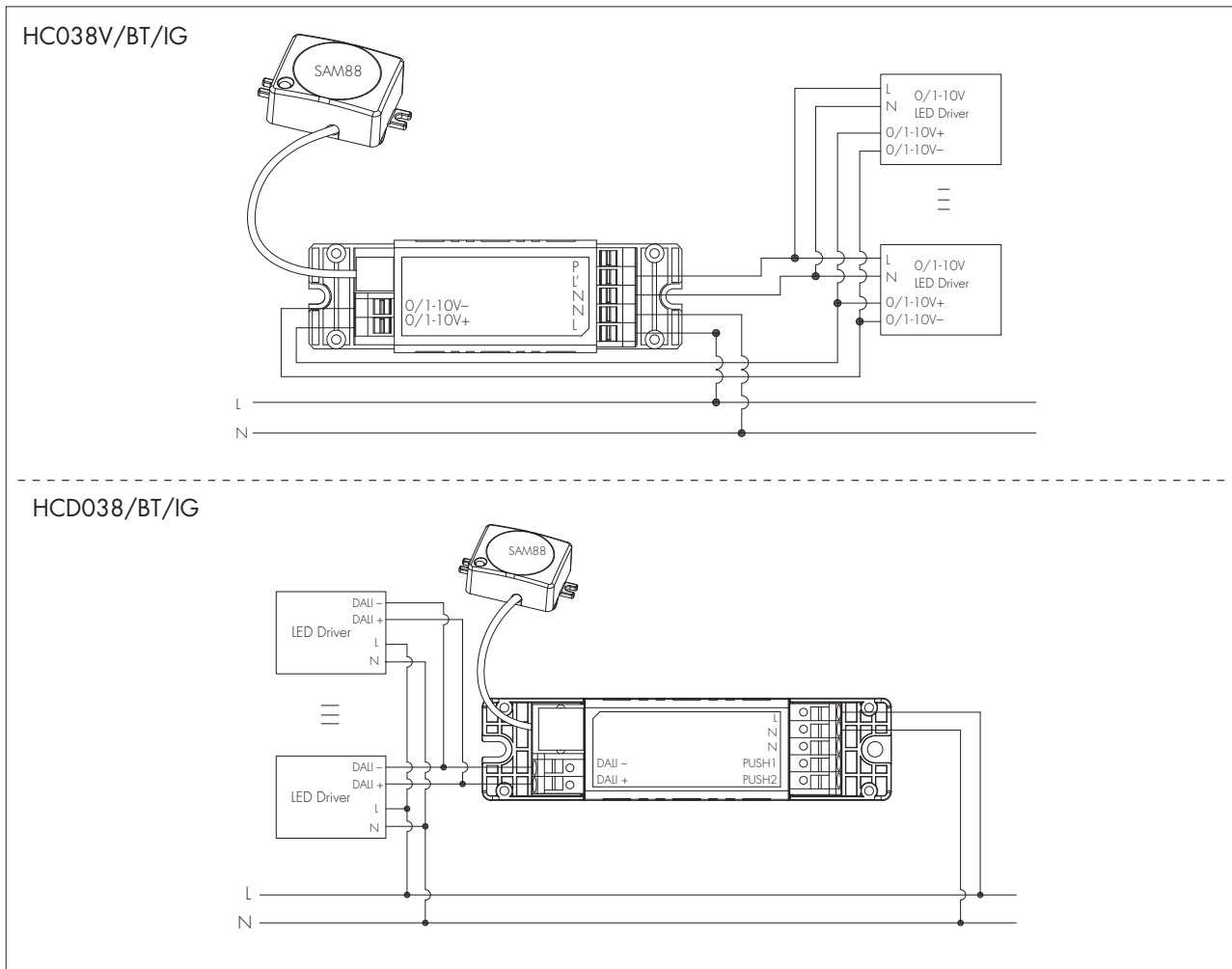


Wire Preparation



To make or release the wire from the terminal, use a screwdriver to push down the button.

Wiring Diagram



Technical Specifications for Sensor Heads

PIR Sensor Properties	
Sensor principle	PIR detection
Operating voltage	5VDC
Detection range *	HIRO5 & HIRO5/FM & HIRO5/E & HIRO7 Max installation height: 3m Max detection range: 6m (diameter)
	HIR63 Max installation height: 3m Max detection range: 12m (diameter)
	HIR63/R Max installation height: 1.2m (forklift); 8m (single person) Max detection range: 1.4m (diameter)
	HIR11 Max installation height: 1.5m (forklift) 1.2m (single person) Max detection range: 20m (diameter)
	HIR12 Max installation height: 1.5m (forklift) 1.2m (single person) Max detection range: 1.8m * 6m (L * W)

HF Sensor Properties	
Sensor principle	High Frequency (microwave)
Operating voltage	5VDC
Operation frequency	5.8GHz +/- 75MHz
Transmission power	<0.2mW
Detection range *	SAM88 installation height: 3m detection range: 12m (diameter)
	Max installation height: 1.5m (forklift) 1.2m (single person)
	Max detection range: 20m (diameter)

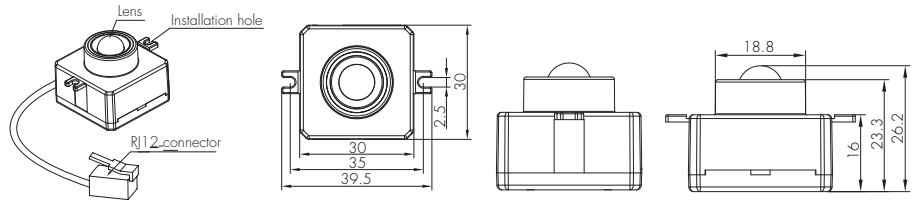
* The detection range is heavily influenced by sensor placement (angle) and different walking paces. It may be reduced under certain conditions.

PIR & microwave sensor heads

The range of PIR and microwave sensor heads below offers powerful number of Plug'n'Play feature options to expand the flexibility of luminaire design. This approach to luminaire design reduces space requirements and component costs whilst simplifying production.

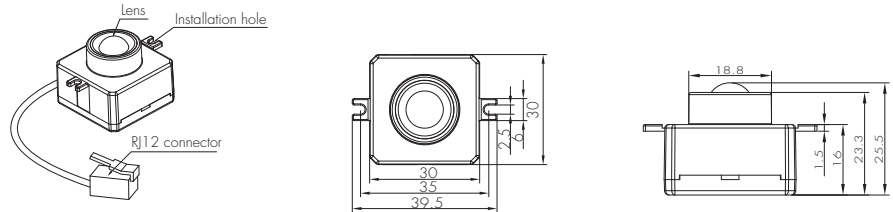
A. HIR05

PIR sensor head
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



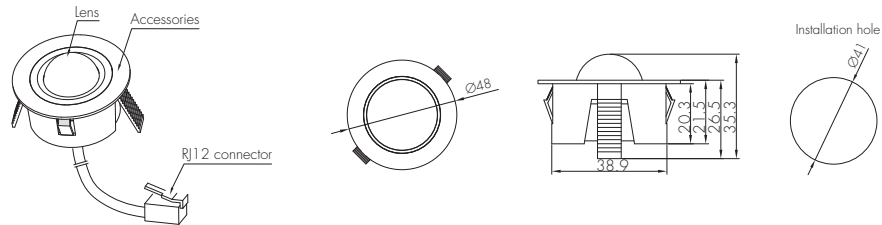
B. HIR05/E

PIR sensor head
The cable length is around 65cm.
photodiode&PIR sensor integrated



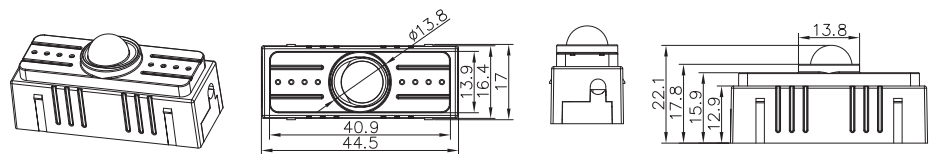
C. HIR05/FM

PIR sensor head
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



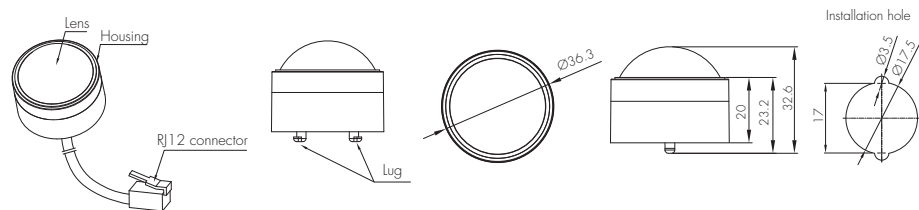
D. HIR07

PIR sensor head
Photocell Advance™
The cable length is around 30cm.
photodiode&PIR sensor integrated



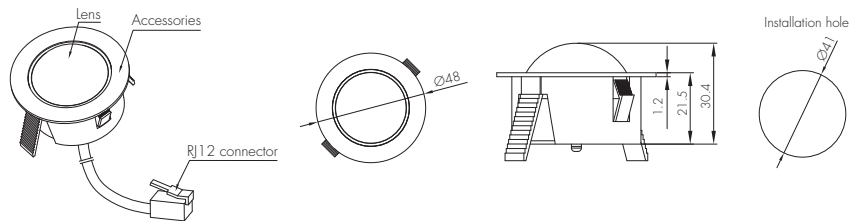
E. HIR11/S

PIR sensor head
Surface mounting
For highbay application
IP65 (facia / lens part)
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



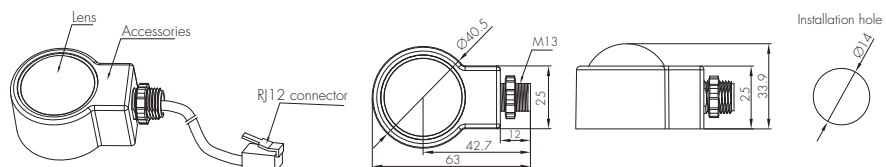
F. HIR11/F

PIR sensor head
Flush mounting
For highbay application
IP65 (facia / lens part)
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



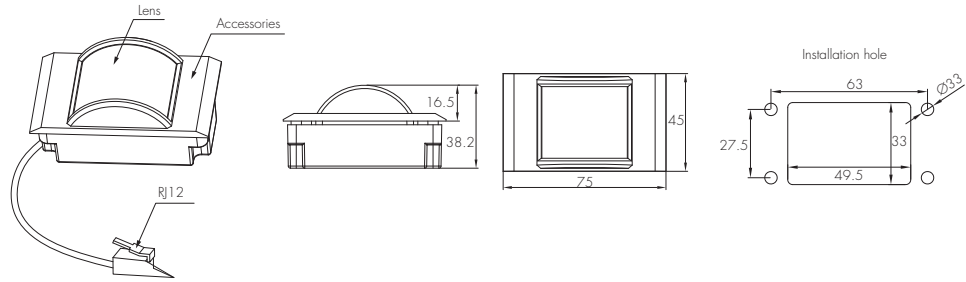
G. HIR11/C

PIR sensor head
Screw to the luminaire by conduit
For highbay application
IP65 (facia / lens part)
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



H. HIR12

PIR sensor head
For highbay application
IP65 (facia / lens part)
The cable length is around 65cm.
Photocell&PIR sensor integrated
daylight harvest function



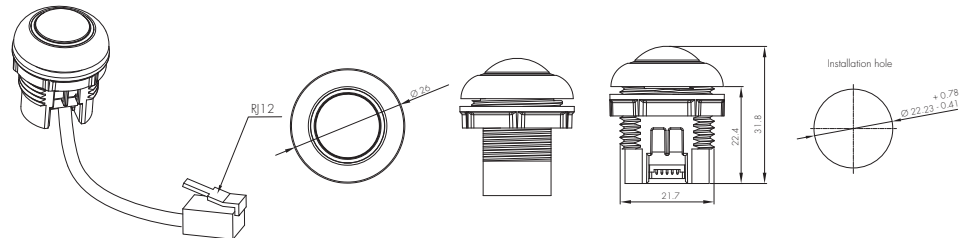
Installation for HIR12



We suggest that the metal plate thickness to be 0.8mm - 1.6mm to ensure perfect focal length for the PIR lens.

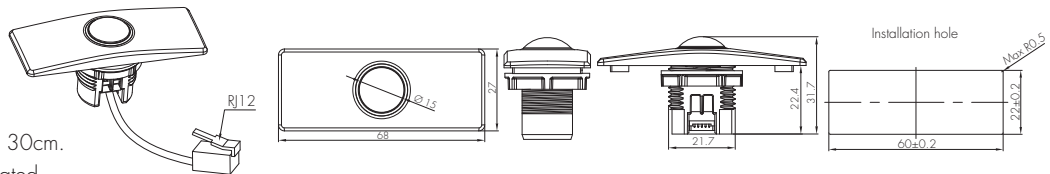
I. HIR63

PIR sensor head
The cable length is around 30cm.
Photocell&PIR sensor integrated
daylight harvest function



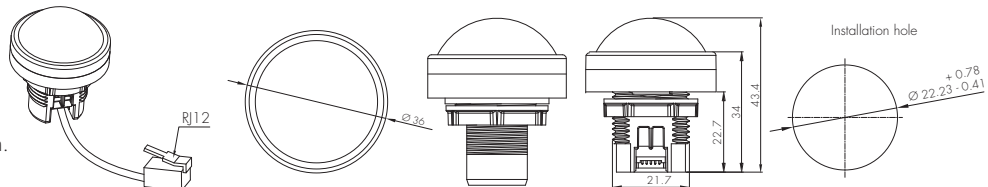
J. HIR63 with HA05

PIR sensor head
Optional accessory
The cable length is around 30cm.
Photocell&PIR sensor integrated
daylight harvest function



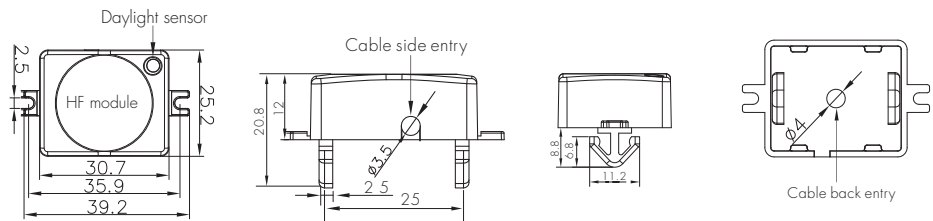
K. HIR63/R

PIR sensor head
IP65 (facia / lens part)
The cable length is around 30cm.
Photocell&PIR sensor integrated
daylight harvest function



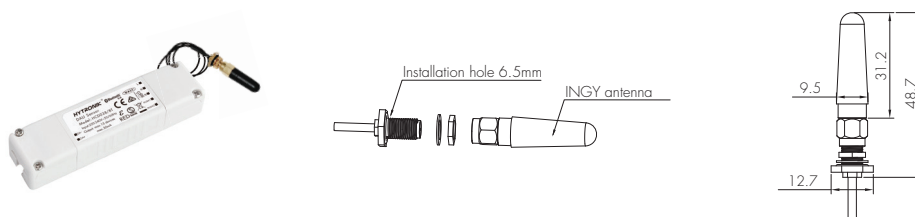
L. SAM88

Digital output HF sensor head
The cable length is around 30cm.
photodiode&HF sensor integrated



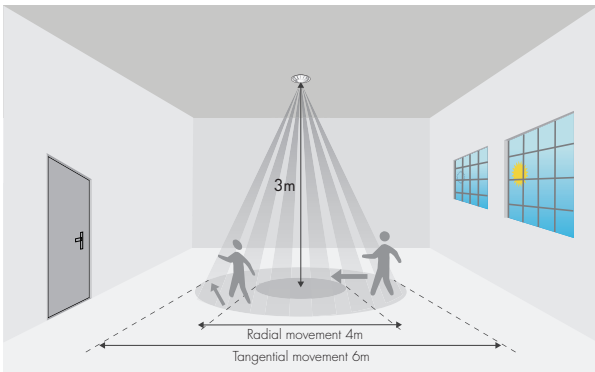
Optional Accessory: Reinforced INGY Antenna

For some special applications, customers may need a larger INGY transmission for both smartphone to device and device to device. Thanks to the reinforced INGY antenna, with it being added to the control base HC038V/BT/IG & HCD038/BT/IG, the transmission distance (smartphone to device) enlarges to 20m, the distance of device to device is around 50m.

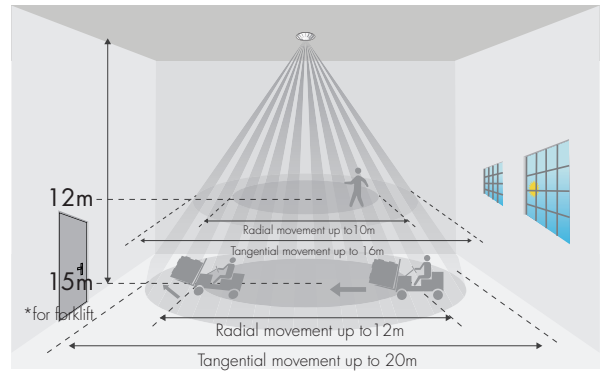


Detection Pattern

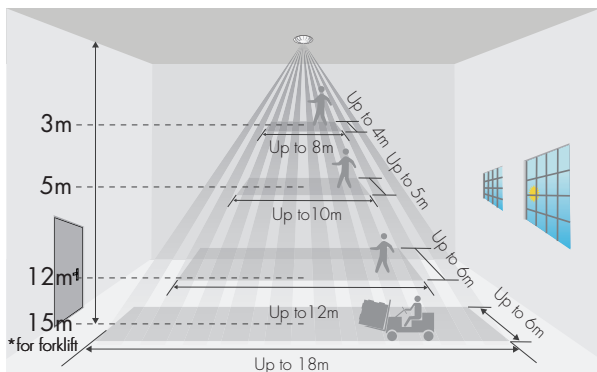
HIRO5 & HIRO5/FM & HIRO5/E & HIRO7



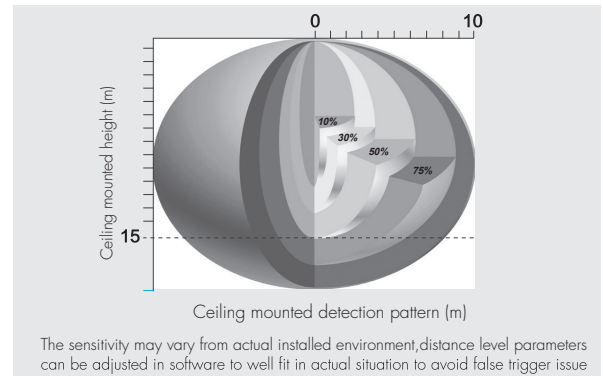
HIR11



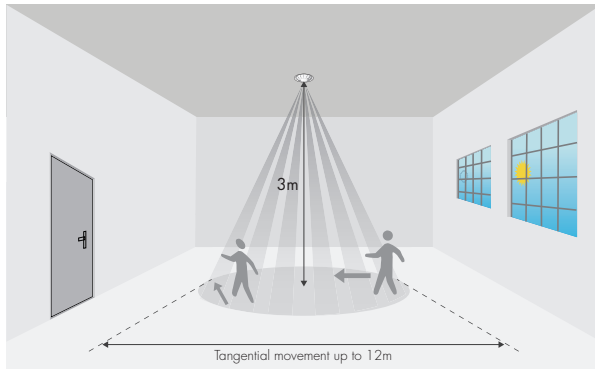
HIR12



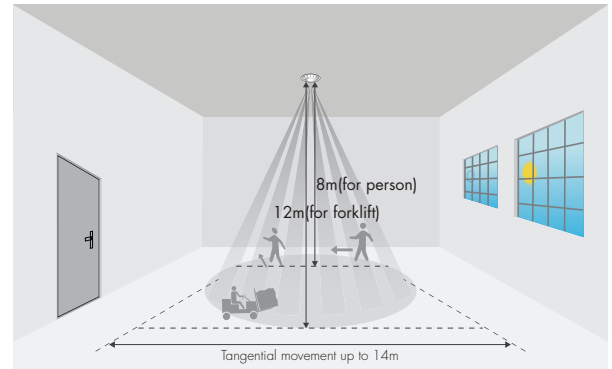
SAM88



HIR63



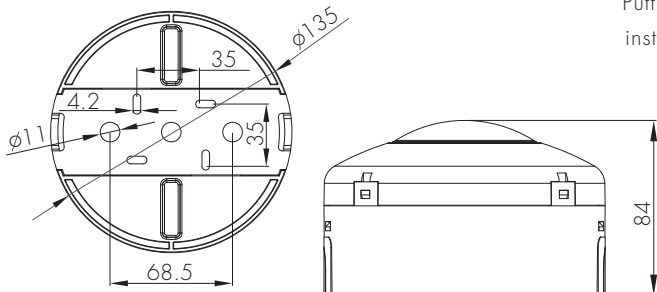
HIR63/R



*The detection patterns are based upon 5km/h movement speed.

HCD038/BT/IG optional with surface mount IP65 box as standalone installation — HCD038/BT/IG/65

Mechanical structure



Putting the device inside the IP65 box, they are then safe and ready for independent installation. They are 2 colors of the box: transparent PC and white PC.



Subject to change without notice.

Installation Instructions

step 1

Put motion sensor into the IP housing and click the cover on

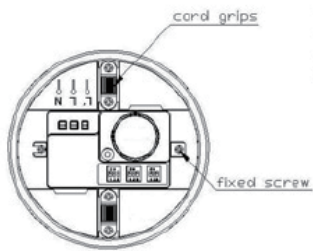


Fig 1.1

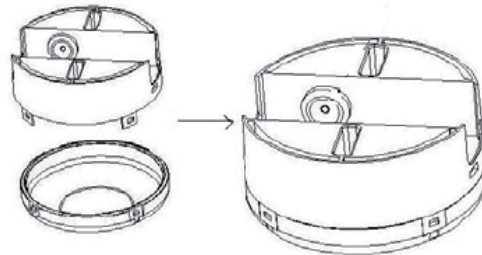


Fig 1.2

step 2

Mounting bracket (three options):

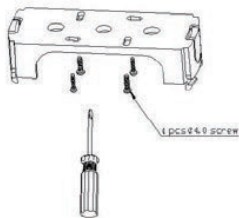


Fig 2.1

Option 1: Mount bracket to flat surface with screws

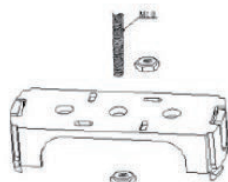


Fig 2.2

Option 2: Mount bracket to ceiling pole with nut

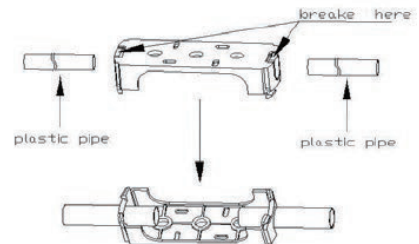


Fig 2.3

Option 3: Put pipe through the bracket hole

step 3

Mount the bracket to the cover

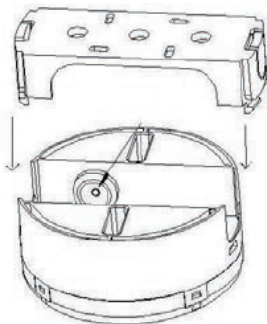


Fig 3.1

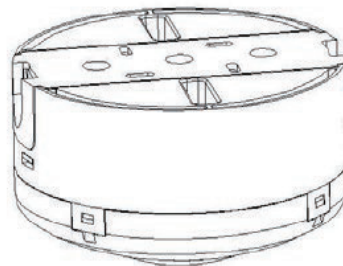


Fig 3.2