

## Response Highbay

### TECHNICAL DATA

SENSOR PRINCIPLE	Microwave (HF), PIR
MICROWAVE SENSOR OPERATION FREQUENCY	5.8 GHz +/- 75 MHz (HF)
POWER SENSOR TRANSMISSION	<0.2 mW (HF)
NUMBER OF DALI DEVICES SUPPORTED	Integrated PSU, Supports up to a maximum of 12 devices
BLUETOOTH FREQUENCY	2,4 GHz
BLUETOOTH TRANSMISSION POWER	4 dBm
RF RANGE – NODE TO NODE	10 – 30 m (LoS) <sup>1</sup>
RF RANGE – SMARTPHONE TO NODE	6 – 10 m
NODES PER IoT GATEWAY :	150 (max) – this limit is based on bandwidth and redundancy for general cases. Please contact Organic Response AB for further information around this limit for custom applications.
PRODUCT ENVIRONMENT FOR USE	Indoor and outdoor areas, with maximum recommended ceiling height of 15 m.

<sup>1)</sup> Environmental obstacles may also impact RF communication range within the mesh network. Field testing and environmental evaluation are advised before large-scale installation.

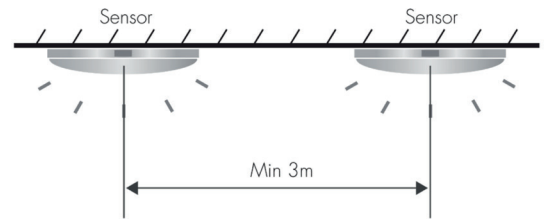
### INSTALLATION

To prevent false triggering between adjacent Response HighBay units, a minimum spacing of 3 meters (LoS) is recommended.

#### Note!

Minimum spacing may vary depending on the sensing mode (HF, PIR, HF+PIR, HF/PIR). For example, in HF mode, interference from HF sensor transmissions and RF communications may cause false triggers; a spacing of at least 6 meters is recommended.

The default HF detection range is set to 3-4 meters. For optimal sensor performance and to avoid unintended detection or interference, the sensors detection range should be configured according to the application and installation conditions.



### DETECTION RANGE

#### MAX DETECTION RANGE:

HF: Ø = 24 m (forklift) / 14 m (human)  
 PIR: Ø = 24 m (forklift) / 20 m (human) At max

#### INSTALLATION HEIGHT:

Max 15 m (forklift detection)  
 Max 12 m (human detection)

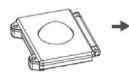
#### DETECTION ANGLE:

360°

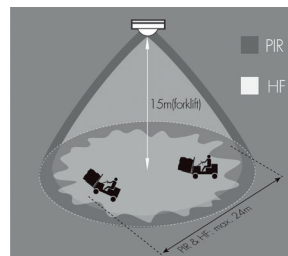
For more information visit

Organic Response [documentation website](#).

#### Wide lens

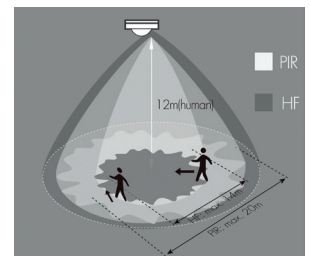


#### Detection pattern for forklifts



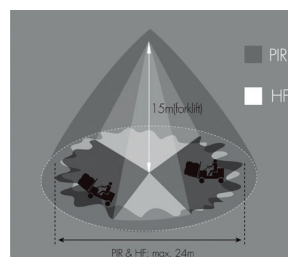
PIR detection: Ø = 24 m (max)  
 HF detection: Ø = 24 m (max)

#### Detection pattern for human

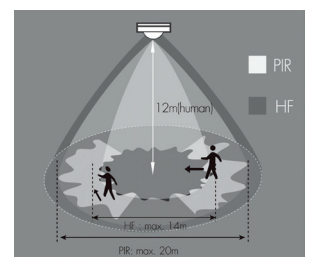


HF detection: Ø = 14 m (max)  
 PIR detection: Ø = 20 m (max)

#### Narrow lens



PIR detection: Ø = 24 m (max)  
 HF detection: Ø = 24 m (max)



HF detection: Ø = 14 m (max)  
 PIR detection: Ø = 20 m (max)