HAISEN®

NX-HBS

PRODUCT SPECIFICATION

MODEL NO	HD07VR-MH/HD07VR-M
INPUT	12VDC
DESCRIPTION	MICROWAVE HIGHBAY SENSOR
CERTIFICATE	UL (E529048)

DC POWERED BI-LEVEL DIM DUSK/DAWN MICROWAVE SENSOR CONTROL (FOR HIGHBAY LIGHT)

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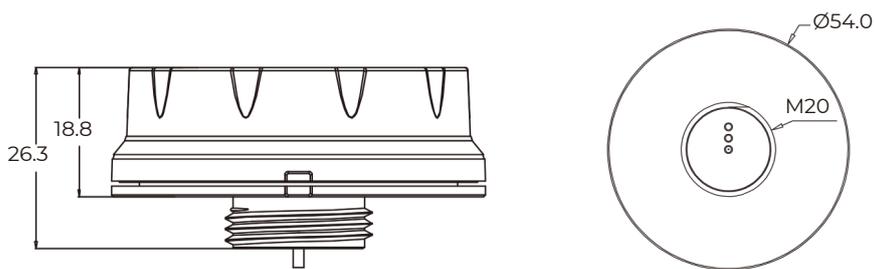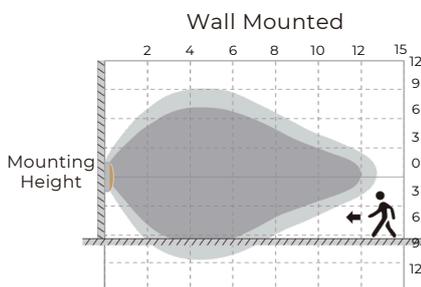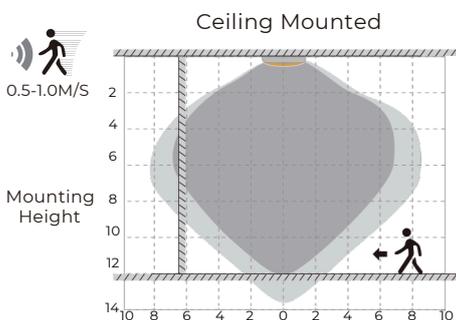|	
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CHECKED BY (R&D)	陈启东
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DATE	2022.09.13

Features & Benefits

HD07VR-MH/HD07VR-M

· Microwave sensor head, 12VDC powered, remote control.

· Bi-level dimming, daylight threshold and dusk/dawn function.

· Compatible with 4 optional receptacles that can partnering with all light fixtures.

· With UL certificate.

c(UL)us
E529048

Demensions Unit:mm

18.8
26.3

Ø54.0
M20

Detection Coverage

0.5-1.0M/S

Ceiling Mounted

Mounting Height

2
4
6
8
10
12
14
10 8 6 4 2 0 2 4 6 8 10

Wall Mounted

2 4 6 8 10 12 15
12
9
6
3
0
3
6
9
12

Mounting Height

HD07VR-MH

Highest mounting height is 12m

This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

Well Detected Area   Possibly Detected Area

0.5-1.0M/S

Ceiling Mounted

Mounting Height

1
2
3
4
5
6
7
10 8 6 4 2 0 2 4 6 8 10

Wall Mounted
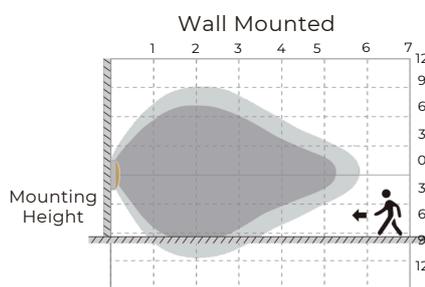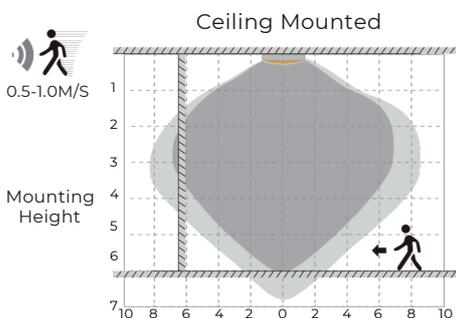
1 2 3 4 5 6 7
12
9
6
3
0
3
6
9
12

Mounting Height

HD07VR-M

Highest mounting height is 6m

This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

Well Detected Area   Possibly Detected Area

Parameters

Model NO.		HD07VR-MH	HD07VR-M
MICROWAVE INFORMATION	Frequency	5.8GHz±75MHz	
	Microwave Power	<0.3mW	
	Installation Height	12m/39ft Max.	6m/19ft Max.
	Detection Distance	≥3m/9ft	
	Warranty	5 Years	
SENSOR PARAMETER	Detection Area	25%/50%/75%/100%	
	Holdtime	5s/30s/1min/3min/5min/10min/20min/30min	
	Daylight Threshold	Disable/ 2lux/ 10lux/ 30lux/ 50lux/ 80lux/ 120lux	
	Standby Dimming Level	10%/20%/30%/50%	
	Standby Period	0s/10s/30s/1min/5min/10min/30min/60min+∞	
	Dusk/Dawn Sensing/ Photocell	Daylight threshold as 30lux/ 50lux/ 80lux/ 120lux Standby period as +∞ ; Standby dimming level as 10%/20%/30%	
	Default Program	Detection Area - 100% Holdtime - 5S Daylight Threshold - disable Standby Period - 0S Standby Dimming Level - 10%	
	Control	Standard Partner HD05R, the LCD screen display remote (purchase seperately) 12VDC	
INPUT	Input Range	10-15VDC	
	Voltage Range	≥30mA	
	Current	DIM 0-10V	
OUTPUT	Signal	12VDC input/ Black&White wire; DIM+/ Purple wire; DIM-/ Pink wire	
	Connection	<30mA Power Consumption	
	Stand-by Power	-20℃~+60℃	
ENVIRONMENT	Working Temp	-40℃~+80℃ Humidity: 85% （non-condensation）	
	Storage Temp	UL (E529048)	
CERTIFICATE & STANDARDS	Cer tification	In accordance with CE ROHS	
	Environmental Requirements	IP65	
	IP Rating	Lasering	
	Silk-Printing	1pcs/white neutral box	
PAC K AG E	Packing Description	200	
	Qty/ctn(pcs)	0.05	
	Net Weight/pcs (kg)	11	
	Gross Weight/CTN (kg)	40*30*25	
	Carton Size (cm)		

Receptacle Options

Type A

Wire color：Black/white，Pink,Purple
The length of the wire：330mm

Type B

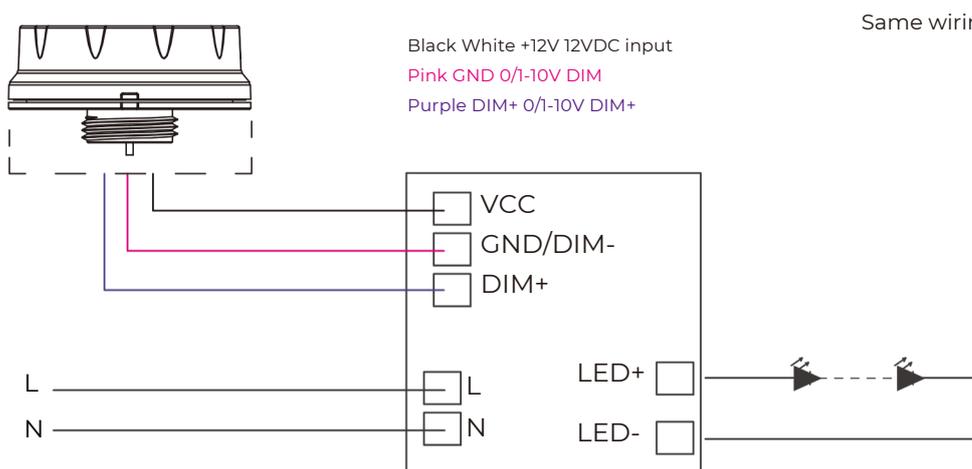Wire color：Black/white，Pink,Purple
The length of the wire：330mm

Type C

Wire color：Black/white，Pink,Purple
The length of the wire：300mm

Type D

CCT & Power Adjustable Receptacle
specially designed for UFO highbay light.

Wiring Diagram

Black White +12V 12VDC input
Pink GND 0/1-10V DIM
Purple DIM+ 0/1-10V DIM+

Same wiring for all the different sensor parts
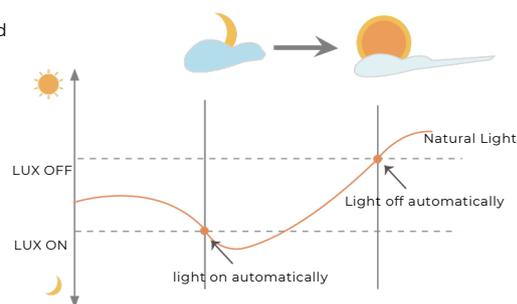
VCC
GND/DIM-
DIM+

L
N

LED+
LED-

Performance

Dusk/Dawn function

HD07VR-MH/HD07VR-M is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

Precondition of Dusk/Dawn function:

1. Standby period is +∞;

2.Standby dimming level is on 10%,20% or 30%;

3. Daylight threshold is on 30lux/ 50lux/ 80lux/ 120lux

1. With Dusk/Dawn function

With insufficient ambient brightness，sensor turns on light and keeps it at standby dimming level even if there is no motion or persence.
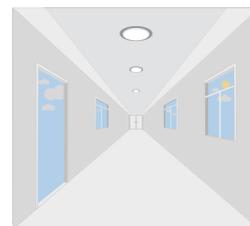
When sensor detects motion or presence it will bring the light level up to 100%.

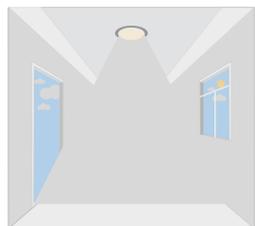After motion is no longer detected,fixture remains at 100% for hold time.

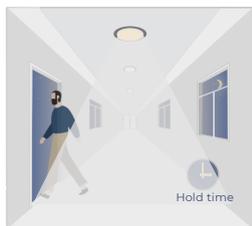After pre-set hold time period it will dim light to standby dimming level again and always keep it.

With sufficient ambient brightness, sensor will turn OFF light automatically.
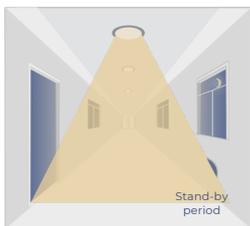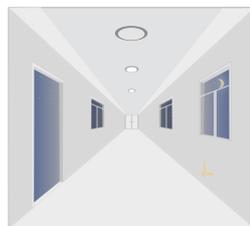
2. Without daylight disabled

Sensor turns ON light when motion is detected.

Sensor keeps for a hold time period after motion leaves

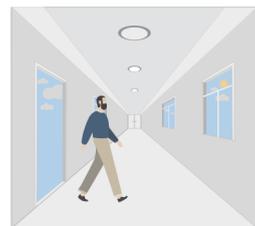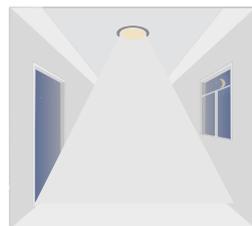Sensor dims light to standby dimming level after hold time if there is still no motion

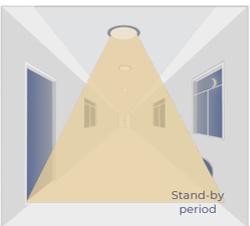Sensor turns OFF light after standby period

3. With Daylight Threshold

With sufficient daylight , the sensor keeps light OFF even motion gets detected

With insufficient daylight, the sensor turns light ON when motion gets detected

After there's no motion detected , the sensor keeps light ON 100% for holdtime.

After holdtime，sensor dims light to standby dimming level for standby period.
if the standby period has been set as Os，sensor turns light OFF automatically
after holdtime.

The sensor turns OFF light automatically after the standby period when there's no motion detected.

Attention

1. The sensor should be installed by qualified electrician and ensure power is OFF before installation.

2. Please read the instruction carefully before using the product and keep it well for other users to read any time.

3. We reserve the right to modify any incorrect text, image and technical parameters.

4. Any unauthorized modification is forbidden. Otherwise all guarantees will be immediately invalid.

5. Product could be optimized without prior notice.

APPLICATION NOTES

1. Suitable for indoor application, half/completely outdoor environment conditions might be captured as moving signals to trigger the sensor.

2. Suitable for ceiling mount installation, adjust sensitivity properly if it's installed on side-wall because it gets more sensitive.

3. Adjust sensitivity properly when the sensor is applied in small/narrow/metal-built/with metal spaces.

4. Microwave sensor can't be placed under/inside metal shell; Microwave module must directly face the detection area with edge lower than light fixture.

5. Keep the sensor away from vibration equipments, air-conditioning outlets, smoke extractors alike conditions to avoid unwanted trigger.

6. Keep the sensor module away from AC input and DC output to avoid high/low frequency signal interference.

7. At least 2m/6.5ft distance between microwave sensors; 1.5m/4.9ft between the sensor and other wireless devices such as routers to avoid possible radio interference.

8. Daylight testing delivered in bright day without shadow or specially designed lampshade or lens.

9. Dimming performance differs when connected to different drivers; If the driver can't completely turn OFF, sensor can't either.

10. Input power voltage must be stable with float less than 10%.

11. The first time powered ON sensor, light will be ON 100% for about 10S then dims to standby level or OFF.

12. Distance detection is delivered by testing person about 165cm in open area as reference, the result differs by size and speed of moving objects, mountng height and real-life situation.