

# 18W 2D bulkhead

## Data Sheet

For Series: OT-OPB96-E/EMC series



Scan for IEC60598-2-22:2021  
[http://otcind.net/download/iec60598\\_2\\_22\\_2021.pdf](http://otcind.net/download/iec60598_2_22_2021.pdf)



Dear partners,

\* Thanks for choosing OTC LED bulkheads for your projects.

OTC always pursue high quality, steady quality products, competitive price and one-stop customer service, and offer enjoyable installation experience.

\* All the OTC bulkheads with 5 years quality guarantee (Battery 3 years) . If any doubts/ questions, please contact OTC project support team directly by email support@otcind.net . You will get solutions in 7~24 hours rapidly.

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## 1 Security relate information

- Installation should be carried out in accordance with the latest edition of the I.E.E. Wiring regulations and taking into consideration the latest building regulations.
- Ensure that all electrical connections are tight with no loose strands, including factory made connections.
- Ensure there is adequate free air circulation of at least 100mm around the luminaire. It is the installer's responsibility to consider fire risk and take appropriate precautions.
- A seperate enclosure may be required if this unit is to be used in dusty and wet environments.

Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations . The guarantee is also invalidated if the luminaire has been I.R. tested. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. We do not accept responsibility for any installation costs associated with the replacement of this product. Your statutory rights are not affected. We reserve the right to alter specifications without prior notice.

## 2 Packing list



The Lamp \*1



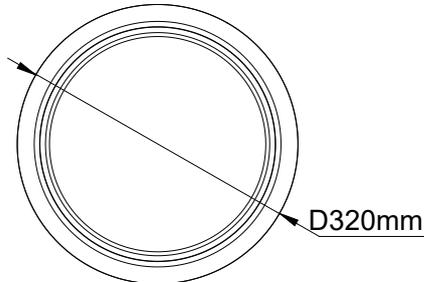
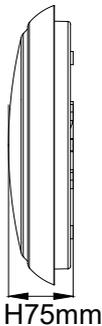
Installation pack \*1



User manual \*1

### 3 Basic Parameters

Model	Art Nr. OT- OPB- *** Li	
	96EM	96EMC
Material	100% PC case	
Dimension	D320*H75mm	
LED Chips	96 SMD 2835	
Color Rendering Index	>80	
Degree of protection	IP65 / IK09	
CCT	3000 4000 or 6000K	
Input Voltage	AC200- 240V 50/60HZ	
Input power	18 +2(For EM) W	
Power factor	>0.8	>0.8
Luminous Flux(Mains)	1700Lm	
LED lifespan	50000hours	
↓ Next are Emergency parameters↓		
Emergency function	Yes	
Standard	60598- 2- 22:2021	
Emergency change over	<0.5S	
Emergency Pack	Ni-Cd 9.6V 1.0Ah	
Emergency time	3 Hours	
Test	Manual Test	
Charging indicator	Green	
Luminous Flux(EM)	180LM	
↓ Next are sensor parameters↓		
Microwave Sensor	NO sensor	Yes
Frequency		5.8GHZ
Detection range		10m
Lux detector		10/ 20/ 30/ Disable
Delay time		10S~10min
Corridor function		With
Ambient light detect		With (See page 6)



## 4 Sensor information/ Setting ( 96EMC only )

### Technical Data

Operating Voltage	20-60VDC
Input current	100mA (Min.)~1300mA (Max.)
Switched power	Max. 60W
Standby power	<0.5W
Detection Range	25/50/75/100% , optional by dial switch
Daylight threshold	10~50Lux, disabled, optional by dial switch
Hold time	10s/1min/6min/12min, optional by dial switch
Standby period	1min/30min/60min/24H, optional by dial switch
Standby Dimming level	10/20/30, disabled, optional by dial switch
Microwave frequency	5.8GHz $\pm$ 75MHz
Max detection Range	20Metres
Detection angle	360°
Mounting height	Max. 4m
Operating temperature	-35°C~70°C
Microwave power	<0.2mW (that is just one 5000th of the transmission power of a mobile phone )

### Microwave sensor setting



Dial switch setting

#### 1. Detection Range Setting

1	2	Distance	1	2	Distance
<input type="checkbox"/>	<input type="checkbox"/>	25%	<input type="checkbox"/>	<input type="checkbox"/>	50%
<input type="checkbox"/>	<input type="checkbox"/>	75%	<input type="checkbox"/>	<input type="checkbox"/>	100%

#### 2. Hold Time setting

3	4	Time	3	4	Time
<input type="checkbox"/>	<input type="checkbox"/>	10S	<input type="checkbox"/>	<input type="checkbox"/>	1Min
<input type="checkbox"/>	<input type="checkbox"/>	5Min	<input type="checkbox"/>	<input type="checkbox"/>	10Min

#### 3. Daylight threshold setting

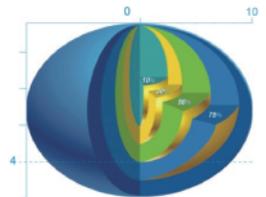
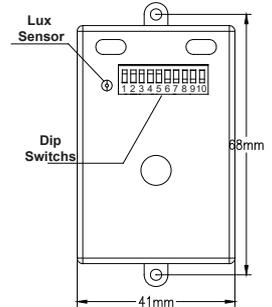
5	6	Light	5	6	Light
<input type="checkbox"/>	<input type="checkbox"/>	Day	<input type="checkbox"/>	<input type="checkbox"/>	10Lux
<input type="checkbox"/>	<input type="checkbox"/>	30Lux	<input type="checkbox"/>	<input type="checkbox"/>	50Lux

#### 4. Standby dim level setting

7	8	CF	7	8	CF
<input type="checkbox"/>	<input type="checkbox"/>	0%	<input type="checkbox"/>	<input type="checkbox"/>	10%
<input type="checkbox"/>	<input type="checkbox"/>	20%	<input type="checkbox"/>	<input type="checkbox"/>	30%

#### 5. Standby period setting

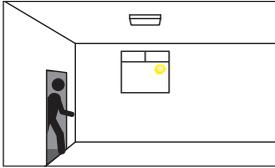
9	10	CF Holding	9	10	CF Holding
<input type="checkbox"/>	<input type="checkbox"/>	24H	<input type="checkbox"/>	<input type="checkbox"/>	1Min
<input type="checkbox"/>	<input type="checkbox"/>	30Min	<input type="checkbox"/>	<input type="checkbox"/>	60Min



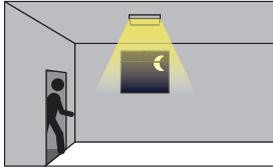
Detection Range

## 5 Typical sensor setting (96EMC only)

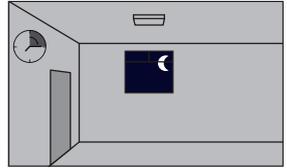
### 1-ON-OFF function



1 - With sufficient ambient light, the light will not switch on, even if the motion sensor is triggered

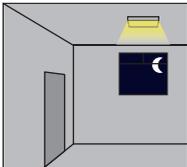


2 - with insufficient ambient light, the light is switched on when motion is detected

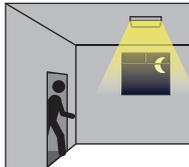


3 - when no motion is detected, the light switches off after the hold-time has passed **The holding time is controlled by 3 & 4.**

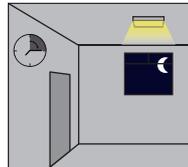
### 2- step dimming function (Corridor function)



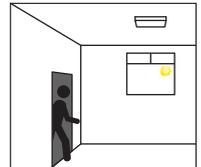
1- The low level will active automatically if insufficient ambient light, despite no motion is detected.  
**10/ 20%/ 30% available by dip switch 7 & 8. It is 20% in this case**



2- when motion is detected. The light brightness to 100%

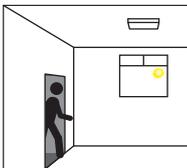


3- when no motion is detected. The light dims to the set low level after the hold-time has passed.  
**Hold-time set by 3 & 4. 1 minutes in this case**

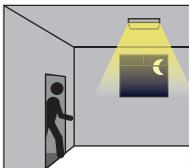


4- The Low level will cut off, if sufficient ambient light. No matter the motion detected or not. (Smart sun-light detection)  
**9 & 10 set to 24H**

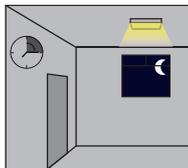
### 3- step dimming function



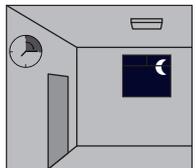
1 - With sufficient ambient light, the light will not switch on, even if the motion sensor is triggered



2 - with insufficient ambient light, the light is switched on when motion is detected



3 - when no motion is detected, the light dims to the set low light level after the hold-time has passed.  
**10/ 20%/ 30% available by dip switch 7 & 8. It is 20% in this case**



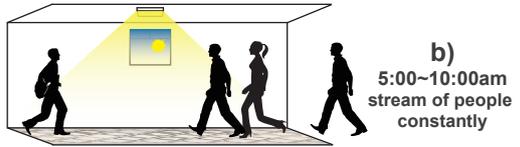
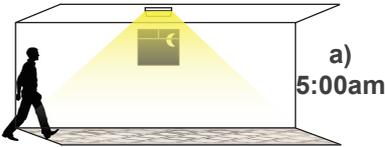
4 - when no motion is detected, the light turns off after the standby-period has passed.  
**The holding time controlled by 9 & 10. It is 30mins in this case.**

5# Smart ambient light analyze



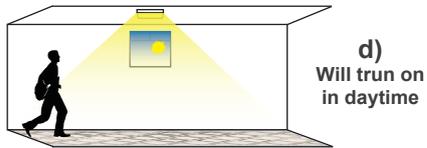
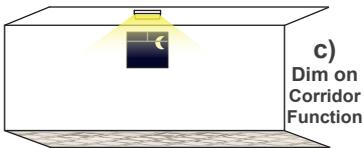
This microwave sensor embed  
Smart ambient light analyze sensor

1- Why the world need ambient light analyze



The Lux control.

In a) if insufficient ambient light at 5:00am, it will sensor on if motion detected. However, if stream of people go through the corridor constantly b), The Lux sensor can not cut off the lamp, despite of sufficient ambient light (10:00am).



Once active the corridor function c). The lux sensor will useless, The light will on no matter in Day or night if motion detected d) .

2- What it will be if you chose smart ambient light analyze sensor?



Once the sufficient ambient light was detected, The luminaire will be certain in OFF mode for energy saving.

INNOVATING YOUR PROJECTS

## 6 Emergency function (96E & 96EMC only)

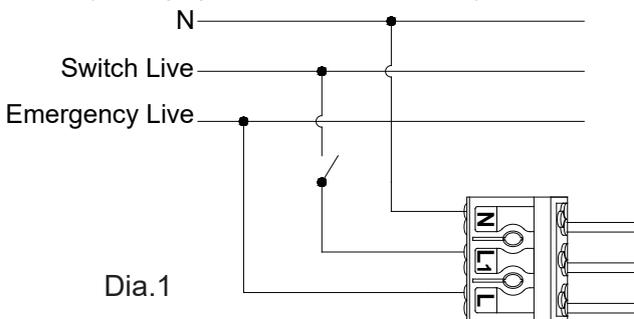
Emergency Technical Data	
Battery Type	9.6V 1.0Ah Ni-Cd battery
Battery Charging	60 mA, Charging >90% in 24 hours
Discharging	200mA, >3hours autonomy time
Test Button	Included
Charging Indicator	Green LED
Standard	IEC60598-2-22:2021

### ADDITIONAL INFORMATION - COMPONENT REPLACEMENT

- The luminaire contains no user replaceable components other than the battery pack contained in emergency versions.
- The battery has a 4 year service life provided it is operated and maintained by regular testing, as detailed in this User manual. Failure to maintain or change the battery may result in reduced duration in emergency mode.

## Emergency function test before installation

1. Connect the AC cable according to the Dia 1. Keep the Switch Live off, and battery plugged on.  
(The green charging indicator on, Faulty indicator off)
2. Press the test button, The charging indicator off, and emergency function activated
3. Unplugged the battery, charging indicator OFF, the faulty indicator flash in 1HZ.



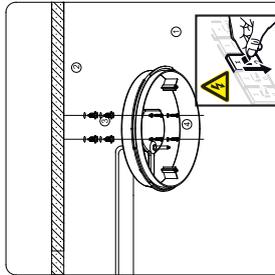
## 7 Installation guide

1. All OTC LED bulkheads are designed for projects. Only qualified electrician can install or maintain it.
2. The mains have to be off during the installation or maintenance.
3. Keep the product far from heat sources and in a well ventilated area.



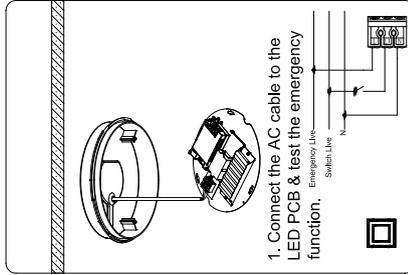
**Caution**

### Installation



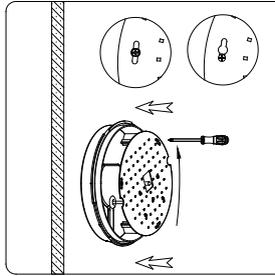
1. Make sure the Mains OFF
2. Drill the install hole on the wall.
3. Nail the Alligator into the hole.
4. Make the AC power cable through the waterproof rubber access cap.
5. Fix the Base to the wall by screws and Aluminium washer.

STEP 1



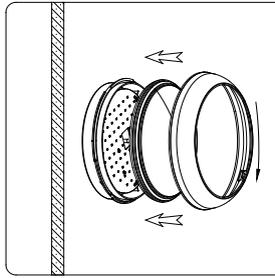
1. Connect the AC cable to the LED PCB & test the emergency function.

STEP 2



1. Install the LED Gear Tray
2. Fix the LED Gear Tray by screw driver
3. Set the sensor according to the user manual

STEP 3



1. Install the Diffuser
2. Install the Decoraiton trim(Optional)
3. Finally , mains on to test the bulkhead again.

STEP 4

## Luminaire emergency inspection record

month	Test	First Year		Second Year		Third Year		Fourth Year		Fifth Year	
		Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date
1	Functional										
2	Functional										
3	Functional										
4	Functional										
5	Functional										
6	1 hour										
7	Functional										
8	Functional										
9	Functional										
10	Functional										
11	Functional										
12	3 hours										

Installed By: ..... Installed Date: ..... Luminaire NO.: .....

Luminaire Locaton: ..... Contact details: .....