





# **Theorylight**

Mining lamp (HB-VD)

## Up to 190lm/W | 50W/70W



ZigBee network control



Motion Sensor



Regional Grouping



theorylight Remote Control



Illuminance sensor



On/off control



RoHS



## Application Scenario



Workshop
Showroom

station

#### **Features**

- ZigBee network intelligent control. Light and motion sensors are standard.
- No gateway is required,
- and partition groups can be easily achieved through the Theorylight remote
- control. Automatic on/off or dimming function with intelligent sensing
- (illuminance, motion) can achieve maximum energy saving effect. Color
- temperature 4000K, 5000K, 5700K or 6500K optional. Power can be provided
- between 50W and 70W. Luminous efficiency can reach up to 190Lm/W. Die-
- cast heat dissipation structure. Power consumption is 50% lower than
- traditional light sources.
- Low maintenance cost.







#### **Smart Components**

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ZigBee Module

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Microwave motion sensor module

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Infrared illumination module

## Sensor parameters (MID)

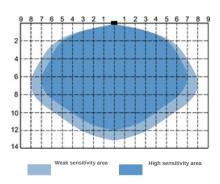
Sensing Angle Sensing Distance

Light sensing range Remote control distance

120° 12m 0~2000 Lux

(infrared illumination) 15 m

#### **Sensor detection angle (MID)**





**Basic Information** 

Light effect 150lm/W / 170lm/W /190lm/W

Power

Color temperature 4000K/ 5000K/5700K/6500K

7(

Color rendering >50000h index MOSO

index MOSO
LED life Non-

Power supply isolated

Power supply efficiency Supply 94%

Warranty 5 years CE,

Certification RoHS

## **Application Environment**

Power supply type

Operating temperature

-30°C~ 50°C

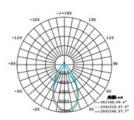
#### **Protection level**

IP protection level Surge protection

IP65

6KV

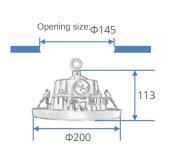
## Light distribution curve



Average beam angle (50%): 60 degrees

#### **Dimensions**

Unit: mm



50W /70W

## Electronic parameters

Input voltage	220~240 Vac			
Input	/ 100-277 Vac			
frequency	50/60Hz			
Inrush current	< 12A			
Power factor	> 0.95			
Harmonic	< 10 %			
distortion				

#### **Mechanical** structure

#### and housing

Structural material Surface treatment material Lens material Surface color Installation method

Die-cast aluminum

Powder-coated PC

Black/White Hanging/

Recessed

#### **Control and dimming**

**Dimming Intelligent Control** 

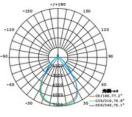
Dimmable

ZigBee/Dimming/Infrared

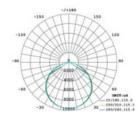
Illuminance

Sensor/Microwave Motion

Sensor



Average beam angle (50%): 80 degrees



Average beam angle (50%): 120 degrees



### Product Parameters

Product Model	Power (±10%)	Color Renderi ng Index	Input voltage	Light Effect	Luminous flux (±10%)	Lighting Angle	Color Temperat ure	sensor Driver Type
TLHWD10-HB-VD-D020- XXX(1)-50W-E150- AXXX(2)-EU-MID-OTA-3.0	50W	70	220-240 Vac	7500 lm 150lm/W 10500lm		60° 80°	4000K 5000K 5700K 6500K	MID = Microwave Motion Sensor
TLHWD10-HB-VD-D020- XXX①-70W-E150-AXXX②- EU-MID-OTA-3.0	70W		100-277 Vac			120°		+Infrared illumination light sensor
TLHWD10-HB-VD-D020- XXX①-50W-E170-AXXX②- EU-MID-OTA-3.0	50W	70	220-240 Vac	170lm/W	8500lm	60° 80° 120°	4000K 5000K 5700K 6500K	MID = Microwave Motion Sensor
TLHWD10-HB-VD-D020- XXX①-70W-E170-AXXX②- EU-MID-OTA-3.0	70W	7.0	100-277 Vac	17011111111	11900lm			+Infrared illumination light sensor
TLHWD10-HB-VD-D020- XXX①-50W-E190-AXXX②- EU-MID-OTA-3.0	50W	70	220-240 Vac	190lm/W	9000lm	60° 80°	4000K 5000K	MID = Microwave Motion Sensor
TLHWD10-HB-VD-D020- XXX①-70W-E190-AXXX②- EU-MID-OTA-3.0	HB-VD-D020- -E190-AXXX②- 70W 12600lm	120°	5700K 6500K	+Infrared illumination light sensor				

Remark:

-XXX1 specifies different correlated color temperatures, 40K = 4000K, 50K = 5000K, 57K = 5700K, 65K = 6500K. -XXX2 specifies different luminous angles, A060 = 60°, A080 = 80°, A120 = 120°. -For US version with 100-277Vac, please contact us. -The light efficiency version provides 150 lm/w by default. If you need 170lm/w and 190lm/w high light efficiency versions, please contact us for other version information.

#### **Package**

	Net weight of lamp (kg)	Packaging	Inner box size (mm)	Outer box size (mm)	External carton weight (KG)	20ft container (PCS)	40ft container (PCS)	40ft High Cube (PCS)
50W/70W	١	١	١	\	\	\	1	1



#### **Safety Warning**

To ensure the quality and safety of the product, please follow the instructions below:

- 1. Before opening the package, please check whether the package is damaged or defective during transportation. If there is any damage or defect, please do not use it and notify your supplier immediately.
- 2. If you find any damage to the product, please keep the product properly and contact the supplier in time.
- 3. Please do not try to use a damaged product.
- 4. The installation, removal and maintenance of this product are operated by electricians; the supplier is not responsible for any problems or damages caused by improper handling, such as operations not allowed in this manual.
- 5. Choose an installation location that can withstand 10 times the weight of the product and ensure a secure installation.
- 6. Wipe the glass with a soft cloth dipped in a little neutral detergent. Never use sandpaper, polishing powder or liquids such as alcohol or gasoline.
- 7. It is recommended to use a high-pressure blower to clean the radiator of the LED mining lamp.
- 8. In order to avoid the risk of electric shock, explosion or electric shock, this product shall only be installed, inspected and maintained by qualified electricians in accordance with all applicable electrical specifications.
- 9. Before and during installation and maintenance, please make sure that the power is turned off.
- 10. The external flexible cable or cord of this lamp cannot be replaced; if the power cord is damaged, the lamp should be replaced.
- 11. The light source of this lamp cannot be replaced. When the life of the light source ends, the entire lamp should be replaced.
- 12. To ensure safety, wiring requires qualified electricians. 13. IP65 can be used outdoors.
- 14. The lamp should be installed where it is out of reach of arms.
- 15. Be careful, there is a risk of electric shock.
- 16. Installation height 3-15m. This description is only applicable to this model of product. If you need more information, please contact our staff.





Serial	Product Name	qua
	Hanging ring	
1) 2)	TLHWD10-HB-VD lamp	11



#### Installation

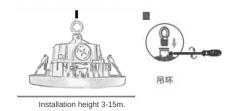
## **Suspension** installation

 ${\bf 1.}\ {\bf Take\ out\ the\ mining\ lamp,\ place\ it\ horizontally,\ and\ then\ check\ whether\ the\ lamp\ body\ is\ intact.}$ 

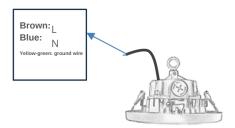




2. Turn the lifting ring until it is fixed on the mining lamp, screw in the safety bolt for safety reasons, and then use the spring hook to hang the lamp directly in the correct position.



3. Connect the main power supply and light up as follows.



#### **Flush Mount**

1. Drill a hole in the ceiling with a size of 145mm.



2. Connect the power supply, pull up the spring, and place the lamp in the hole.



3. After installation, power on the lamp.



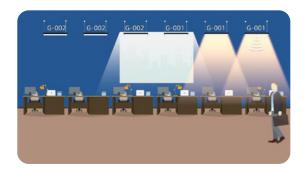
Note: When installing or removing, please turn off the power!

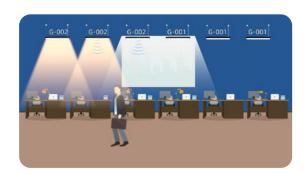


## Typical working scenarios



Hema Technology's Theorylight smart lamps have built-in motion sensors and light sensors. Through the "Theorylight" remote control, you can realize group editing and parameter setting of the equipment. By adopting standard ZigBee technology, the Theorylight series of lamps have the natural advantages of long transmission distance, multiple channels, and automatic relay.





Users can use the theorylight remote control to set sensor parameters for theorylight lamps in groups or single lamps with one click; they can also use the theorylight remote control to adjust the brightness of single lamps or groups. theorylight smart lamps work in coordination with the motion sensors in the same group, and the light sensor intelligently controls the switch of lamps according to the ambient brightness. theorylight smart lamps have a variety of styles and categories, and are compatible with panel lights, linear lights, tri-proof lights, mining lamps, and T8 lamp tubes. They can be widely used in different scenarios such as offices, warehouses, factories, and parking lots.