BBM
LEDPRODUCTS

BBM Smart Multifunction Led High Bay Lights

Sensor Ready

Smart Multifunction LED High Bay

- Sensor pluggable, adding sensors whenever you need
- Power & CCT field-adjustable, reduce SKUs by up to 80%
- Efficiency up to 200 LPW, delivers up to 46000 lumens
- Various lens/Glasses & lampshades covering all your application needs
- Right-sized Compact design, reduces shipping cost by up to 50%

Corrosion Resistant Glass Lens, No-Glare Lens, Wire Guard PC Refractor ,Aluminum Reflector Optional

First Sensor Pluggable Intelligent Design

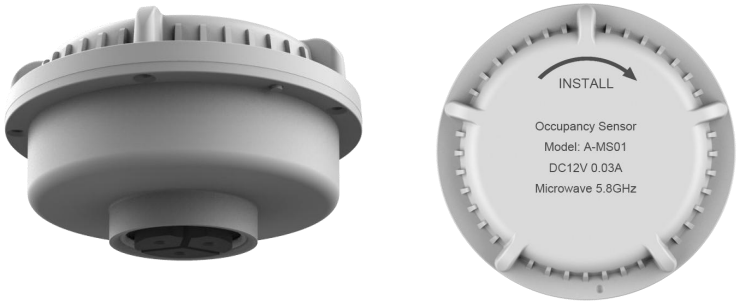
Mounting sensors and make your luminaire smart whenever you need （Optional）

World's first patented designed module type plug & play sensor and sensor embedded Luminaire.
User can easily scale from an ordinary fixture to a smart light fixture in 3 seconds.

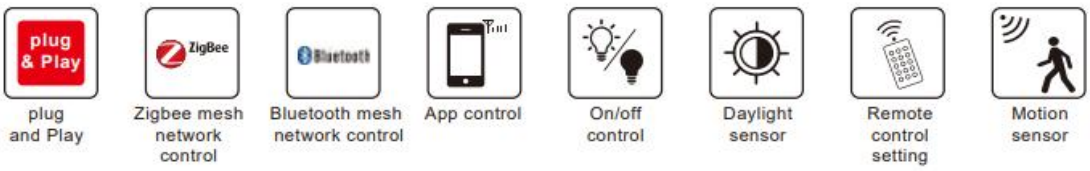
3 seconds easily plug-in ➡ Smart LED High Bay

World's first patented Pluggable Sensor

You can install your luminaires today and mount sensors or IOT controllers whenever you need - without any hassle



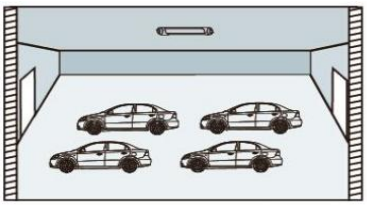
- 3 seconds easy plug-in scalability
- No re-circuiting or new control wiring
- Zigbee/Bluetooth mesh network smart control
- Controls are easy to upgrade,install and maintain



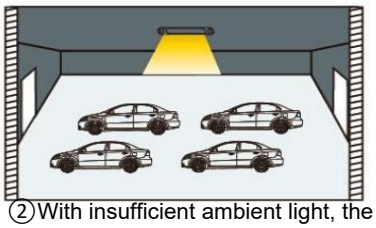
Plug&Play Occupancy Sensor

ON/OFF and Automatic Dimming Functions for maximum energy saving

1) ON/OFF Function (stand-by period set at '0')



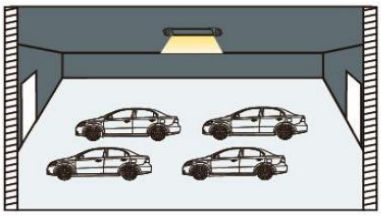
① With sufficient ambient light,the light will not be switched on even if with motion signal



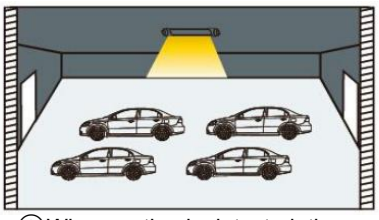
②With insufficient ambient light, the sensor switches on the light when motion is detected.

③ After elapse of hold time, the sensor switches off the light when no motion is detected

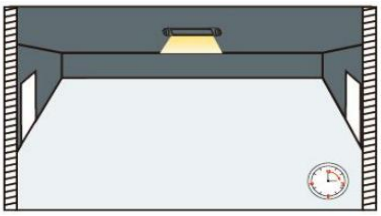
2) 2-step dimming function (stand-by period set at "+∞"



① If there is no motion detected, the light will be remained at a low light level all the time

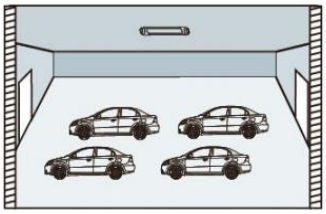


②When motion is detected, the sensor will switch on the light to 100% brightness

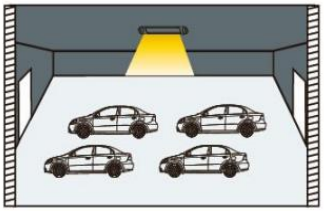


③ After elapse of hold time, the sensor dims the light at the present low light

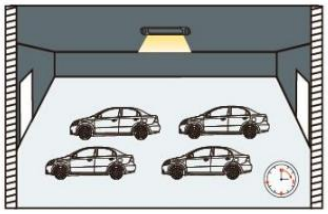
3) 3-step dimming function (stand-by period set at "5min"or"15min")



① With sufficient ambient light,the light will not be switched on even if with motion signal



②With insufficient ambient light, the sensor switches on the light when motion is detected.

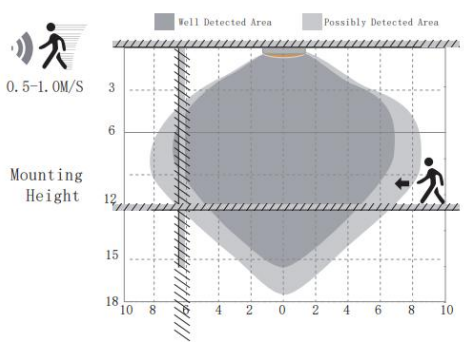


③ After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.

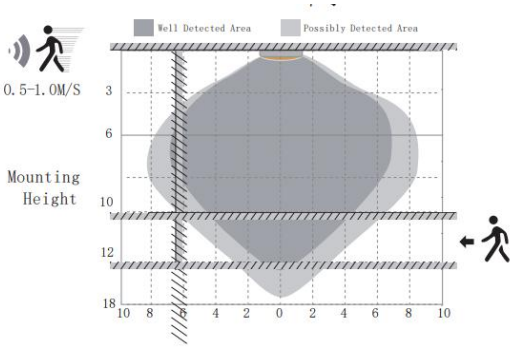
④ After elapse of stand by period, the sensor switches off the light if no motion is detected in the detection zone

Sensor detection range

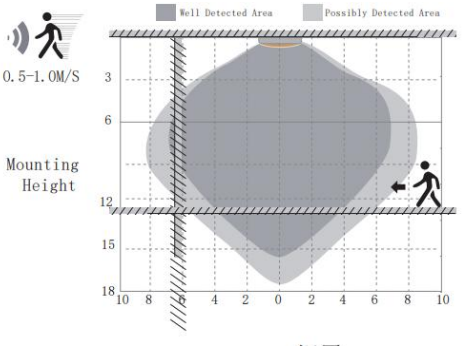
PC/Glass Lens with Sensor



PC Refractor with Sensor



Aluminum Reflector with Sensor



Compatible with 3rd party smart network control system

legrand

enlighted

PacWave

ACE Smart Highaby with PC Refractor，Aluminum Reflector and WATTSTOPPER/Enlighted/PacWave sensors

Smart Network Lighting-Control Systems

Using various sensor, scheduling and programming technologies, controls maximize energy savings and minimize lighting maintenance. They accomplish this by reducing your energy spend to the bare minimum – only distributing

Evaluate which controls strategy will save your facility the most.

APP, Network control
Lights in multiple locations can be controlledfrom wireless devices such as mobile phones (IOSI / Android

Wireless Switch control

Remote

Occupancy Sensing
Typically Saves:15-55%
No one needs light in empty spaces. Turning lights off or dimming when no one is there to use them is an obvious and easy way to save energy

Auto Scheduling
Typically Saves:10-40%
Tell the Smart HighBay when to illuminate a zone and it will take care of the rest with auto-adjustments based on your time zone. Update schedules right from your smartphone

Task Tuning
Typically Saves:5-15%
Programming the output of an individual or group of luminaires to the level that provides just the right amount of light for the space, task or area.

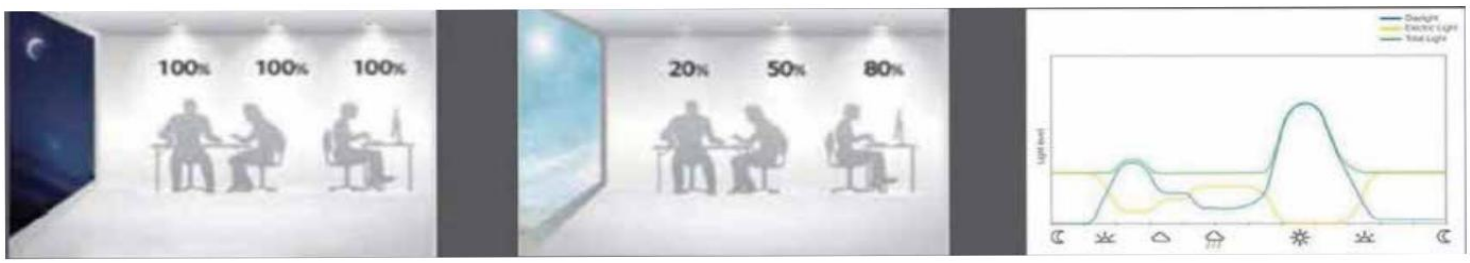
Daylight Harvesting
Typically Saves:15-45%
Get More from Your Daylighting.Daylight harvesting automatically regulates the use of electric lighting in response to the amount of daylight available.make sure you use only what you need.

Load Shedding
Typically Saves:15-45%
Load-shedding,or temporarily reducing the load of a system to avoid energy costs when they're at their highest

Zoning & Group control
Typically Saves:5-20%
Group luminaires and form unique lighting control zones for a control strategy via software-defined means, not via electrical

Wireless Daylight Sensor

Daylight harvesting automatically regulates the use of electric lighting in response to the amount of daylight



Night:Same brightness forall area

Day:Lower brightness on the windows side

Automatic dimming-On-demand lighting

Occupaney Sensors & Code Compliance ---Aecording to IECC 2015 Code Provision C405.2.1.1.1. office and warehouse fixtures must automatically turn off within 30 minutes of all oceupants leaving the space

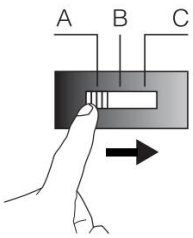
Daylight Harvesting & Code Complianee --- Aceording to IECC2015 Code Provision C405.2.3.12. daylight-responsive controls should be installed within each space with sidelight and toplight daylight zones totaling more than 150W

Compatible with 3rd party smart network control system

Tool-Less Field Adjustable Wattage & Color Temp

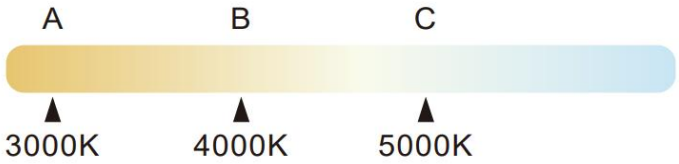
Internal Switch Provides 3-4 light levels for greater flexibility in one product (default set to high). Wattage can

- Reduce overall number of SKUs to 2 while offering 8 wattacge and 3 CCT choices
- Streamline ordering and inventory,making it flexible enough for distributor stock and flow



Desired Wattage / DIP Switch Settings

SKUs	Desired Wattage	DIP Switch Settings		
		1	2	3
SKU 1	60W	—	—	—
	100W	—	—	ON
	120W	—	ON	—
	150W	ON	—	—
SKU 2	150W	—	—	—
	180W	—	—	ON
	200W	—	ON	—
	240W	ON	—	—



Efficiency up to 200 LPW ,delivers up to 46000 lumens

Excellent heat dissipation and special aluminum reflective maximizes LED performance, efficiency up to 200 LPW. Offering various lumen packages from 8,000 to 46,000 lumens, covers all your application needs

High efficacy models pay for themselves and help you save on energy costs for years to come.

Single Luminaire	6L T5HO	Typical LED High Bay	High Efficacy
Lumens	26,353	26,217	26,558
Input Watts	343	220	135
Operating Hours/Year (15h/day)	5,475	5,475	5,475
Annual Energy Costs (0.11 KWh)	$206.57	$132.50	$81.30
Monthly Costs (0.11 KWh)	$17.21	$11.04	$6.78
Amazing VS 6L T5HO		Annual Savings $$	Up to $125.27
Amazing VS Typical LED High Bay		Annual Savings $$	Up to $51.19

Estimate does not include utility rebates or maintenance savings.Values based 5000K, 70 CRI.

Can You Afford to Spend **60% More** Per Fixture Per Year?

It's Time to Put $$ Back in Your Pocket!

Right-sized Compact Design

Excellent heat dissipation making it can be designed to smaller size,reduces shipping cost by up to 50% , saves a great deal of valuable shelf or cargo space.

	100W	150W	200W
20'GP Load	3,636 pcs	2,652 pcs	2,128 pcs
40'HQ Load	8,280 pcs	6,184 pcs	4,802 pcs

Various Mounting option




Product Specifications：

LED & Optical Assembly

• CRI: 70+ Standard (80, 90 contact factory for lead-time)
• System Efficiency: **Standard**, 135~150lm/W; **Superior**, 165~180lm/W; **Premium**, 185~200lm/W optional.
• Fixture Rated Life: L70 @ 100,000 hrs
• Distribution /Lenses: 60, 90, 120 degrees lens ,diffused lens ,corrosion resistant Glass Lens,PC refractor ,Aluminum reflector optional

Electrical

• Input Wattage: 60W,100W,120W,150W,200W,240W ,Adjustable Wattage
• Input Voltage Range: 100-277VAC(347 and 480V available)
• System Power Factor (PF): >0.95
• Total Harmonic Distortion (THD): <20%

Ratings & Evaluations

• Operating Temperature: –30℃ to +45℃ (-22℉ to 113℉) Up to 55℃ (131℉) optional
• IP65,Suitable For Wet Locations
• Safety: ETL/cETL Listed
• Utility: DLC 5.1 Premium,LLLC Network Control not all models are DLC listed,Please refer to http://www.designlights.org/QPL for complete information

Controls

• Dimming: 0-10V Dimmable (standard) and Dali2 optional
• Wireless Networking & Sensing:

Mounting

• Typical Mounting:
Standard Ring Mount,Hook Mount ,U Bracket Mount and 1/2 NPT Pipe Mount optional

• Cord & Plugs:
Standard = 1ft cord (no plug)
3ft, 6ft, 12ft, 15ft, 20ft Cord optional;
15A, 20A, twist lock plug optional

Warranty

• 5-years warranty standard, 7-10 years warranty optional

Accessories (order separately)

• Sensor pluggable receptacl - SR
• Pluggablemotion sensor <30 Ft - MS1
• Pluggablemotion sensor <40 Ft - MS2
• Remote for settings sensors-RM1(at least one required per project)
• Zigbee Wireless Sensor-ZG01
• Bluetooth Wireless Sensor-BT01
• Zigbee Gateway-GW(100 fixture need 1,at least 1 required per project)
• Surge protector - SPT
• Emergency Battery - EM
• 120° Lens - 12L
• 90° Lens - 90L
• 60° Lens - 60L
• Diffused Lens - DL

Ordering Information:

MODEL SELECTION **Typical order example: A-NHB150-50-90LSR**

PRODUCT ID	Wattage	EFFICIENCY	CCT	OPTICS/LENS	Voltage	Dimming	SENSOR/ WIRELESS	MOUNTING	CORD	PLUG	options
A-NHB											
A-NHB= Nebula Series LED High Bay	60=60W 100=100W 120=120W 150=150W 200=200W 240=240W ,Adjustable Wattage Optional	**(OMIT)**= Standard, 135~150lm/W; **S** = Superior, 165~180lm/W **P** = Premium, 185~200lm/W	**30**=3000K **40**=4000K **50**=5000K,, Adjustable CCT Optional	**12L**=120°Lens **90L**=90°Lens **60L**=60°Lens **DL**=Diffused Lens Maximum Glare Reduction	**(OMIT)**=120-277V, std **347**=347V **480**=480V	(OMIT) = 0-10V dimmable **DA** = Dali	(OMIT)=None ,std ; **SR**=Sensor pluggable receptacl; **MS1**=Motion Sensor <30 Ft **MS2**=Motion Sensor <40 Ft **ZG01**=Zigbee Wireless control	**(OMIT)** = Standard Ring Mount,**HM**=Hook Mount ,**UM**=U Bracket Mount **NM**=1/2 NPT Pipe Mount	**(OMIT)**= 1ft cord, std ; **C3**=3 ft cord **C6**=6 ft cord	**(OMIT)=None,std;** **P1**=5-15P **P2**=5-20P **P3**=L5-15P **P4**=L6-15P **P5**=L7-15P **P6**=L7-20P **P7**=L8-20P	**EM**=EM - Emergency Backup 8W ; **EM20** - Emergency Backup 20W; **SPT**=Surge protector 10kv