

# Vigilant® LED High Bay Controls - UL

for Indoor and Outdoor Industrial Applications

## Take control of your lighting

The High Bay lighting control system combines Dialight's industry leading LED High Bay with a powerful yet simple to use High Bay Gateway.





### On / Off Control

#### Instant on/off capabilities

• Take advantage of the instant on/off capabilities of LED lighting with the touch of a button



### **Dimming**

Maximize your ROI by taking advantage of the easy to use dimming feature

- Adjust light output from 100% down to 20% in 10% increments
- Dimming events are faded for smooth transitions between light levels

### Grouping

Fixtures can be combined into groups to allow quick control over different areas in a facility

• Fixtures can be set to blink for easy identification

### Scheduling

Dialight's comprehensive, energy efficient and fully customizable lighting schedule allows you to get the most out of your lighting network, 24/7

- Easily control when fixtures turn on, off or dim
- Lighting events are set by daily profiles and can be scheduled in one-minute intervals

## Wireless IEEE 802.15.4 Standard

The Vigilant with Controls allows facilities to leverage numerous energysaving and operational advantages





### Frequency of operation

### Standard communication platform

• 2.4GHz global digital communication standard



### **High Bay Gateway**

## Dialights High Bay Gateway can control multiple devices

- One High Bay Gateway can control up to 100 endpoints / nodes (lights/sensors)
- Can be controlled from any Tablet or PC on the network

### Mesh network topology

## Increases reliability between Dialight's LED High Bay and network

- Extends network range by relaying network communications from light to light
- Increases reliability by self-healing wireless network routing

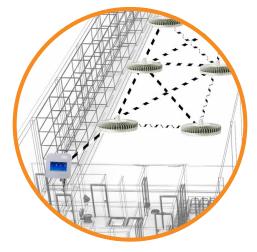
### Secure encrypted communications

#### Secure authentication

- 128-bit AES encryption
- Secure authentication and device joining

## Wired DALI System

The High Bay lighting control system combines Dialight's industry leading LED High Bay with a powerful yet simple to use High Bay Gateway.



#### **DALI** Communication

#### Create a fixture network

- Create a fixture network of up to 64 Lights
- DALI communication wires can be wired without regard for polarity

## Wi - Fi Connections

Directly connect to the High Bay Gateway from your Wi-Fi enabled device

### Wi - Fi Connections

Direct Wi-Fi connectivity to the High Bay Gateway gives users the freedom to fully manage the lighting system while roaming about the lighting area.

• Fixtures can be set to blink for easy identification



## **Dialight Enterprise Software**

## **DACS (Dialight Architecture for Controls System)**



#### **Certifications & Ratings**

- UL 60950-1
- CAN / CSA-C22.2 #60950-1
- EN 60950-1
- JEC 60950-1
- FCC CFR
- ICES 003

- EN 55022
- EN 55024
- VCCI V-3, V-4
- KN 22, KN 24
- CNS 13438
- CISPR 22

#### **Mechanical Information:**

 Fixture weight:
 1 lb (454 g)

 Shipping weight:
 2.2 lbs (998 g)

 Dimensions:
 4.59" x 4.41" x 1.36"

All values typical unless otherwise stated

#### **Electrical Specifications:**

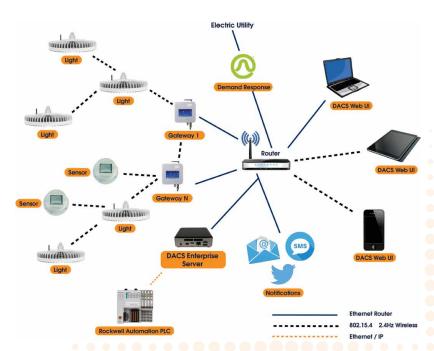
Operating voltage: 12 - 19V DC, 65W
Operating temperature: 0°C to +50°C
Storage temperature: -20°C to +70°C

**Ethernet:** 10 / 100 / GB Ethernet

Memory: 8 GB DDR3 / 250 GB mSATA

Part Number	Voltage			
DACN825A	12 - 19V DC, 65W			

<sup>\*</sup>For more information on DACS, please refer to user manual



### **DACS Features**

- Multiple layers of device communication
- Access from network capable devices
- Alert / notification support

## **Dialight Enterprise Software**

**DACS (Dialight Architecture for Controls System)** 





Home - navigate back to home screen



Alerts - navigate to view alerts



ADR - navigate to ADR managment



Options - log out / learn more about DACS

#### **Main Screen**

The main screen gives the user access to all of the features and controls that the DACS system offers. Each sub-menu will direct the user to a different feature / control.

- Menu bar features quick navigation options
- Emergency override feature automatically brings all lights to 100% ON when pressed
- Real-time clock



### **Menu Options**

Each button holds a different tool to help the user control the DACS system.

- System Configuration This sub menu will allow you to customize all aspects of your DACS system. This includes adding/removing gateways, lights, and sensors. You can also modify Schedules, Groups, Users, and Alerts.
- Devices This sub menu will allow you to view all devices currently connected to your system. You can also view in-depth information about each light/sensor as well as identify each light individually.
- Alerts This sub menu will allow you to view and manage all current alerts with the system.
- Reporting This sub menu will allow you to print power reports for specific light groups or all connected lights.
- Group Control This sub menu will allow you to control your lights outside of schedules. You can dim individual groups or all devices connected to your DACS system.
- ADR Management This sub menu will let you view/modify your current ADR events.

\*For more information on DACS, please refer to user manual

## **Daylight Harvesting Sensor**

### **Standard Models**



## 

#### **Certifications & Ratings**

• UL 916

- CE
- CSA 22.2 #205
- IP certification rating (pending)

#### **Features & Benefits**

- Capable of measuring up to 2000 lux (200 fc)
- Wireless communication to Gateway
- Low power consumption
- Seperate mounting base for easy installation
- Fully compatible with Dialight WLC-004-MBAL Gateway

#### **Mechanical Information:**

 Fixture weight:
 10 oz (283 g)

 Shipping weight:
 18 oz (510 g)

 Dimensions:
 5" D x 2.5" H

Mounting: Mounting plate (comes with sensor)

#### **Electrical Specifications:**

**Operating voltage:** 110 – 277V AC, 50/60 Hz

Total system power

consumption: ~300mW

Operating temperature: -13°F to +149°F (-25°C to +65°C)

Lux measurment range: 0 - 2000 lux

EMC:

Emissions: EN55022 Class A

RF immunity: IEC/EN61000-4-3 Class A, 10V/m

Conducted immunity: IEC/EN61000-4-6 Class A, 10V/m

**Surge:** IEC/EN61000-4-5 2kV/2

Ohms L -> N combination wave

Voltage dips & interrupts: IEC/EN61000-4-11 Class B

Construction:

Housing: UV stabilized polycarbonate

Color: Grey

Lens: UV stabilized polycarbonate

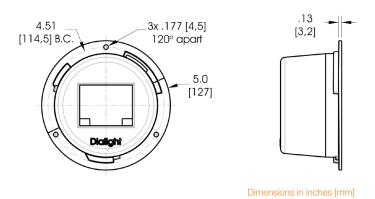
All values typical unless otherwise stated (tolerance +/- 10%)

Part Number	Voltage			
DLHU124UG	100 - 277V AC, 50/60 Hz			

## **Wireless Occupancy Sensor**

### **Standard Models**





#### **Certifications & Ratings**

- UL 916
- CE
- CSA 22.2 #205
- IP66
- 5yr full performance warranty

#### **Mechanical Information:**

Fixture weight: 10 oz (283 g)Shipping weight: 18 oz (510 g)Dimensions:  $5" \text{ D} \times 2.5" \text{ H}$ 

**Mounting:** Mounting plate (comes with sensor)

#### **Electrical Specifications:**

**Operating voltage:** 3.3V via 2 – AA Lithium Batteries

(included)

Total system power

**consumption:** 25 mW typical / 83 mW max **Operating Temp:** -40°F to +149°F (-40°C to +65°C)

Harmonics: IEC 61000-3-2

Noise requirement /EMC: FCC Title 47, Subpart B, Section 15,

class A device. RF Immunity; 10V/m, 80MHz-1GHz

**Transient protection:** 1 kV line to line

2 kV line to ground

**THD:** <20% **Power Factor:** > 0.9

#### Construction:

Housing: UV stabilized polycarbonate

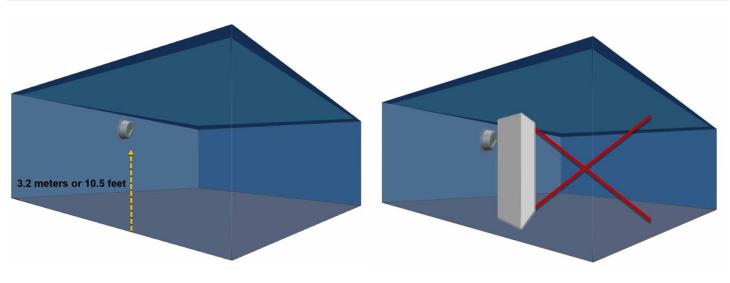
Finish: Grey
Lens: Fresnel

All values typical unless otherwise stated

## **Wireless Occupancy Sensor**

## **Ordering Information and Mounting Options**

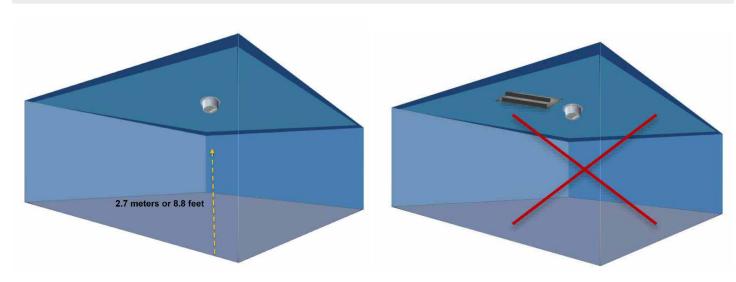
#### Mounting Options - Narrow



The long range sensor is best used as a wall mounted sensor. The recommended install for this sensor is 3.2 meters or 10.5 feet from the floor.

Avoid placing sensors where obstacles can block the sensors line of sight.

#### Mounting Options - Wide



The wide optic sensor is best used as a ceiling mounted sensor. The recommended install for this sensor is 2.7 meters or 8.8 feet from the floor.

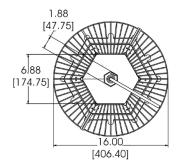
Sensors should be mounted 6 feet away from any open air vent or strong air supply openings.

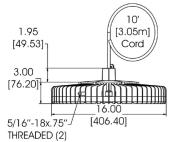
Part number	Voltage	Lens	Angle	
WOSU12BG	3.3V via 2 – AA lithium batteries	Fresnel	Narrow	
WOSU22BG	3.3V via 2 – AA lithium batteries	Fresnel	Wide	

## Vigilant® LED High Bay with Controls - UL

### for Indoor and Outdoor Industrial Applications







Dimensions are in Inches [mm]

#### **Certifications & Ratings**

- UL 1598/ACSA 22 #250
- NEMA 4X
- IP66

#### **Features & Benefits**

- 10 year full performance warranty
- L70 rated for >100,000 hours @ 25°C ambient
- Dual Mounting option available
- Significantly reduced glare
- Instant on/off
- · Maintenance free

#### **Mechanical Information:**

Fixture weight: 18 lbs (8.16kg)
Shipping weight: 24 lbs (10.8kg)

Mounting: 10' (3.05m) STOOW Power Cord

#### **Electrical Specifications:**

Operating Voltage: 110 – 277V AC: 26,500lm models

100 - 277V AC: 18,000, 14,000 &

11.000lm models

Total system power

consumption: See table

**Operating Temp:** -40°F to +149°F (-40°C to +65°C)

Harmonics: IEC 61000-3-2

Noise requirement /EMC: FCC Title 47, Subpart B, Section 15,

class A device. RF Immunity; 10V/m, 80MHz-1GHz

**Transient protection:** 6kV/2 ohm combination wave,

as per IEEE C62.41, line-line and

line-ground

**THD:** <20% **Power Factor:** > 0.9

Construction:

**Housing:** Copper free aluminum

Finish: Superior dual coat finish
Sealed polyester topcoat

Chemical-resistant epoxy prime

Lens: Tempered glass

#### **Photometric Information:**

**CRI:** 75

CCT: 5000K (cool white)

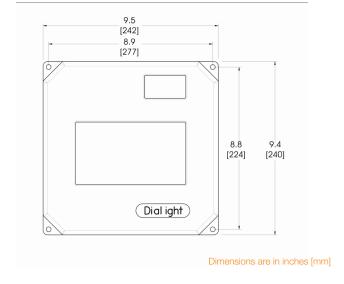
4000K (neutral white)

All values typical unless otherwise stated (tolerance +/- 10%)

## High Bay Gateway - UL

## for Indoor and Outdoor Industrial Applications





#### **Physical Dimensions**

- 9.5in (241.3mm) Width
- 9.5in (241.3mm) Height

#### • 2in (50.8mm) Depth

#### Screen

- 7in (177.8mm) Diagonal
- 6in (152.4mm) Wide
- 3.5in (88.9mm) High
- User Input: Resistive Touch screen
- Resolution 800 x 480 pixels

#### **Mechanical Information:**

Fixture weight: 7lbs (3kg)
Shipping weight: 12lbs (8kg)

**Mounting:** Four (4) .25in (6.35mm) Flat surface wall

See table

mounting screw holes

Cabling: RJ45 10/100MB Ethernet port

#### **Electrical Specifications:**

Operating Voltage: 120 - 277V AC

Total system power

consumption:

Operating Temp: -40°C to +65°C

Network Adapter: RJ45 10/100MB Ethernet port

Construction:

Housing: Aluminum

Plastic available (consult factory)

All values typical unless otherwise stated (tolerance +/- 10%)

## Vigilant® LED High Bay with Controls - UL

## **Ordering Information**



#### HBXW3-SSL-316 HBXW3-SSL-304

· Stainless steel bracket



#### HBXCAB48

 48" long stainless steel safety rope (for use with safety bracket)



#### **HBXDC**

- 21° slope dust cover HBXDC45
- 45° slope dust cover **HBXDC60**
- 60° slope dust cover



#### **FLX1HBXSS**

• 304 Stainless steel forward throw bracket



#### HBXTH347480

 Top hat with 347-480V AC step down transformer (consult factory when using with hook or loop)



**HBXH** 

• Hook



#### HBXW2

• Swivel bracket and cable gland

#### HBXW3

· Swivel bracket



#### **HBXL**

• Loop



#### **HBXDUALBRCKT**

Dual bracket



**HBXCU** 

Ceiling / wall mount



#### HBXREF22

• 22" Acrylic reflector (must be ordered with high bay, not a retrofit option)



**HBXCG** 

• Cable gland



#### **HBXLENAC**

- Acrylic lens, clear
   HBXLENAD
- · Acrylic lens, diffused

## Vigilant® LED High Bay with Controls - UL

## **Ordering Information**

Part number	Fixture Lumens	Wattage	Lumens per Watt	Voltage	ССТ	Wet Location	Lens	Optics
Vigilant LED High Bay - Jennet 2.4GHz								
HEGMC4PJ-SNG	26,500	213	124	110 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4PJ-SNG	26,500	213	124	110 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
HEGMC4KJ-SNG	18,000	145	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4KJ-SNG	18,000	145	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
HEGMC4GJ-SNG	14,000	113	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4GJ-SNG	14,000	113	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
HEGMC4DJ-HNG	11,000	89	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
			Vigilant LED	High Bay - DALI P	rotocol			
HEGMC4PA-SNG	26,500	213	124	110 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4PA-SNG	26,500	213	124	110 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
HEGMC4KA-SNG	18,000	145	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4KA-SNG	18,000	145	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
HEGMC4GA-SNG	14,000	113	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Circular
HEGRC4GA-SNG	14,000	113	124	100 - 277V AC	5000K (cool white)	IP66	Tempered glass	Wide
High Bay Gateway - DALI & Jennet								
WLC-004-MBAL		10W typical, 20W max		120 - 277V AC				

<sup>&</sup>lt;sup>1</sup>Part numbers in table above are in cool white (5000K CCT). For models needing neutral white (4000K CCT), replace the 5th character with a N. Example: HEGMC4PN-SNG becomes HEGMN4PN-SNG. Deduct 8% from lumen values when specifying neutral.

<sup>&</sup>lt;sup>2</sup>For models needing Safety Bracket replace the 10th character with a S. Example: HEGMC4PN-SNG becomes HEGMC4PN-SSG

All values typical unless otherwise stated, Lumen values are typical (tolerance +/- 10%

#### **North American HQ**

1501 Route 34 South Farmingdale, NJ 07727

Fax: 732-919-3113 Fax: 732-751-577 info@dialiaht.com

#### **EMEA HQ**

Exning Road, Newmarket Suffolk, England, CB8 0AX Tel: +44 (0) 1638 665161

#### Australia office

38 O'Malley St Osborne Park WA 6017 Tel: +61 (0) 8 9244 7600

#### Brazil

Av. Joao Antonio Meccatti, 1601 – Galpao 07 – Jd Planalto Jundiai – SP – 13211-223

Fax: +55 (11) 4431-4300

Email:vendas hrasil@dialight.com

#### Copenhagen

Ejby Industrivej 91 E 2600 Glostrup

Fax: +45 3582 0099

E-mail:Info-dk@dialight.con

#### **Houston office**

16830 Barker Springs Rd Ste 407 Houston, TX 77084 Tel: 732-919-3119 info@dialight.com

#### Middle East office

Level 42 Emirates Towers (Office Tower) Sheikh Zayed Road Dubai, United Arab Emirates Tel: +971(0)4319 7686

#### **Southeast Asia office**

240 Macpherson Road #07-05 Pines Industrial Building Singapore 348574

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