



# The FHUM<sup>™</sup> Series

High lumen output LED High Bay Light



# FHUW





High lumen output LED High Bay Light



PROJECT:

DATE:

TYPE:

PREPARED BY:



#### **KEY FEATURES**

High lumen output

Secondary Surge Protector

Emergency battery backup available

Multiple Mounting options

Controls Ready

#### **TECHNICAL SPECIFICATIONS**

#### COMPLIANCE

#### **UL** Listed

UL 1598 Suitable for wet locations

#### IESNA LM79 & LM-80 Testing

Paclights LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

#### **DLC Qualification**

Selected models of this product are on the Design Lights Consortium (DLC) Qualified Products List and are eligible for rebates from DLC Member Utilities. To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org/qpl

#### LED CHARACTERISTICS

#### LEDS

Long-life, high-efficacy, surface-mount LEDs

#### Lifespan

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

#### **Color Rendering Index**

>80

#### **Color Uniformity**

PacLights' range of Correlated Color Temperature follows the guidelines of the American National Standard for Specications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017

#### OTHER

#### 5-Year Limited Warranty\*\*

The PacLights 5-year, limited warranty covers light output, driver performance and paint finish.

\*\*PacLights's warranty is subject to all terms and conditions found at paclights.com/warranty

#### CONSTRUCTION

#### **IP** Rating

Ingress Protection rating of IP65 for dust and water

#### **Ambient Temperature**

Suitable for 50° C (122° F) ambient temperature

#### **Cold Weather Starting**

The minimum starting temperature is -22 F°/-30° C

#### Housing

Die-cast aluminum housing; stainless steel external hardware; silicone gasket.

#### Mounting Methods

- Hook mount (standard)
- 1/2" NPT threaded pendant (standard) - 3/4" NPT threaded pendant (optional)
- Ceiling/wall surface mounting with trunnion arm (optional)
- Green Technology

Mercury and UV free, and RoHS compliant.

#### Optical

90° Polycarbonate Lens; UGR <28; Optional 90° aluminum reflector

#### ELECTRICAL

#### Drivers

0-10V continuous dimming, can be dim to off. 6ft cord (AC power, and dimming) Input Voltage: 120-277V, 50-60 Hz (UV models), 277-480v (HV models) Power Factor :> 0.9; THD: < 20%; Flicker: <5%; Surge Protection: 4kV Wattage: FHUW-300 (300w); FHUW-400 (400w) Input Current: FHUW-300-UV: 2.8A (120v); 1.4A (240v); 1.2A (277v). FHUW-300-HV: 1.2A (277v); 0.7A (480v). FHUW-400-UV: 3.7A (120v); 1.9A (240v); 1.6A (277v). FHUW-400-HV: 1.6A (277v); 0.9A (480v).

#### Secondary Surge Protector

20kV (in additional to LED driver's intergrated lightning arrester)

#### **Control Receptacle**

Controls ready - 12v DC plug-and-play control receptacle with cap.





#### FEATURES

#### Secondary Surge Protector



Secondary surge protector can act as the second line of defense, in addtional to the LED driver's intergrated lightning arrester.

#### **Controls Ready**



FHUW comes integrated with a sensor port for easy in-field plug and play sensor installation. Control options include:

- Microwave bi-level motion & daylight(threshold)
- PIR bi-level motion & daylight(threshold)
- Microwave bi-level motion & daylight harvesting\*
- Networked Lighting Controls (NLC)\*
- \* adapter required for daylight harvesting or NLC options.

#### **CONTROL** Options

#### Microwave Bi-level Motion Control (option: -MCW)



Microwave occupancy control detect motions even through plastic, glass and thin non-metal materials. It can be mounted as high as 40 ft high and contains a signature 3-step dimming function, which is perfect for areas that require a light change notice totally switching off the light. Optional daylight(threshold) function will turn off fixture on pre-set level of ambient light. Control parameters are adjustable by an optional wireless commissioning device.

#### Passive Infrared Bi-level Motion Control (option: -MCP)



A PIR sensor can detect changes in the amount of infrared radiation impinging upon it, which varies depending on the temperature and surface characteristics of the objects in front of the sensor. It can be mounted as high as 40 ft high and contains a signature 3-step dimming function, which is perfect for areas that require a light change notice totally switching off the light. Optional daylight(threshold) function will turn off fixture on pre-set level of ambient light. Control parameters are adjustable by an optional wireless commissioning device.

#### Bi-level Motion and Daylight Harvesting Control (option: -MCD)



In addition to all the functions provided by a microwave bi-level occupancy control, daylight harvesting control also use daylight to offset the amount of electric lighting needed to properly light a space. Optional wireless commissioning device can be purchase separately to customize settings.

#### -MCW / -MCP Sensor Control Specification \*default setting

Manual Trim/Dim	0%-100%; Quick Preset 70%/80%/90%/100%*
Sensitivity	20%/50%/75%/100%*
Hold Time (before dim)	10s/1min*/10min/30min
Daylight Threshold	10/30/50/100 Lux, or Disable*
Stand-by Time(before turn off)	1min*/30min/60min, or Never
Stand-by Dimming Level	10%/20%*/30%/50%
Detection Height	up to 40ft
Detection Radius	up to 40ft (-MCW) or up to 15ft (-MCP)

Optional wireless commissioning device can be purchase separately to customize settings of options: -MCW/-MCP controls.



#### -MCD Sensor Control Specification \*default setting

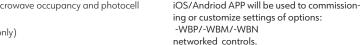
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Sensitivity	20%/50%/75%/100%*
Hold Time (before dim)	10s/1min/5min*/10min/15min/20min/30min/60min
Daylight Threshold	10/30/50/100/300/500 Lux, or Disable*
Stand-by Time(before turn off)	1min/30min/60min*, or Never
Stand-by Dimming Level	10%/30%*/50%
Detection Height	up to 40ft
Detection Radius	up to 50ft

#### Networked Lighting Controls (option: -WBP/-WBM/-WBN)



Network Lighting Controls (NLC) offer Luminaire Level Lighting Control (LLLC) based on Bluetooth-enabled Mesh Networking of Luminaires. Individual addressability enables luminaires to be communicated with each other within the zone/network. Luminaires can be grouped, trim and controlled by using the smart device app or connected wall switches. Scheduling, scene and sensors can be added for automation among the lights within the zone/group.

- (-WBP) Wireless bluetooth networked control with PIR occupancy and daylight harvestina sensor
- (-WBM) Wireless bluetooth networked control with microwave occupancy and photocell sensor
- (-WBN) Wireless bluetooth networked control (node only)



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#### Emergency Battery Backup (-EM)



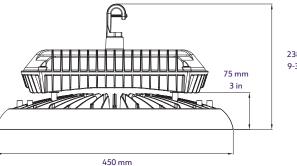
FHUW series emergency backup models save time and cost in the installation. When there is a power outage, the emergency backup driver and battery will power the FHUS to a brightness of 9,000 lumen (sku: EMU-60) for at least 90 mins.

#### REFLECTOR Option

#### $90^{\circ}$ Aluminum Reflector (-RF)



Aluminum reflectors create focused, direct light distribution. They are designed to direct light downward with minimal scattering, resulting in a more concentrated beam. This makes them well-suited for tasks that require precision or for illuminating specific areas.



450 mm 17-3/4 in

450 mm 17-3/4 in

DIMENSIONS

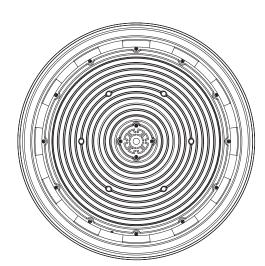


WIREGUARD Options

#### Wireguard (-WG)



Optional wireguards can be attached to FHUW High Bays to provide extra protection from physical damage.







FINISHES
all models
White





Weight 18 lbs

238 mm 9-3/8 in

75 mm 3 in

### **FHUW**<sup>™</sup>



#### MOUNTS

Hook or 1/2" NPT (standard)



FHUW comes with a robust and efficient hook mount tailored specifically for these high-intensity fixtures. The simplicity of a hook mount's design also ensures a swift installation process. The fixture can also be attached to 1/2" NPT conduit or pipe.



3/4" NPT Adapter (-3QCM)



Surface mount installations can be adapted to various types of ceiling structures, such as flat or sloped surfaces, making them a flexible option for different environments. It also allows for adjusting the angle of the high bay fixture, enabling you to direct the light towards specific areas or objects, thus optimizing the light distribution in the space.



Pendant mount adapter enables the attachment of high bay fixtures to a 3/4'' NPT conduit or pipe.

#### PERFORMANCE

FHUW - 300

300W	<b>4000K</b> Neutral	<b>5000K</b> Daylight	
LUMENS	41,700	42,300	
LM/W	139	141	

#### FHUW - 400

400W	<b>4000K</b> Neutral	<b>5000K</b> Daylight		
LUMENS	55,600	56,400		
LM/W	139	141		



#### ORDERING INFORMATION

FHU/W<sup>™</sup>

FHOW											
Family		Model		Inj	put Voltage			ССТ			Option
			_								
FHUW	- [					-			-		
	300	300w		UV	120-277v		40	4000K		[blank]	None
	400	400w		ΗV	277-480v		50	5000K		EM	Emergency battery backup
										WG	Wireguard
										3QCM	3/4" conduit adapter
										тм	Surface mount
										RF	90° aluminum reflector
										мсш	Microwave bi-level motion sensor control
										MCP	PIR bi-level motion sensor control
										MCD	Microwave bi-level motion + daylight harvesting sensor control
										WBN	Wireless bluetooth networked control (no sensor) (NLC)
										WBP	Wireless bluetooth networked control w/ PIR & daylight sensor (NLC)
										WBN	Wireless bluetooth networked control w/ Microwave & daylight sensor (NLC)

Help line: (800) 988-6386 Email: CS@PacLights.com Website: www.PacLights.com

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**Keilton Networked Controls**, a DLC® Qualified Networked Lighting Controls Product, make it easy for facilities to save energy, improve occupancy comfort and achieve code compliance by adding Luminaire Level Lighting Controls (LLLC) to indoor and outdoor applications. It allows for easy field installation of sensors and network nodes with selected PacLights controls ready fixtures. Using the Keilton app, nodes can be commissioned without the need for a gateway or internet access.









#### LEARN MORE, VISIT www.paclights.com/NLC





### **FEATURES**

- Luminaire Level Lighting Control (LLLC)
- Bluetooth-enabled Mesh Networking of Luminaires and Devices
- Individual Addressability, address individual or multiple luminaires
- High-end and Low-end Trim
- Zoning & Grouping
  - Add and control up to 100 devices per zone
  - Add unlimited zones to scale for bigger installation
  - Create unlimited groups (combination of sensor or network nodes) within a zone
  - Link and control the whole group or zone
- Scene control
  - Create and link scenes to individual lights or groups within a zone
  - ♦ Select scene with App or wall switch
- Time Scheduling for individual lights, groups or scenes
- Sensors integrated with BLE, occupancy and daylight sensing
- Multi-level Dimming, Daylight Harvesting and Occupancy controls
- Manual/Automatic ON/OFF and Automatic partial ON/OFF control capability
- Control with wireless wall switch or smart device
- Secure commissioning with Keilton App
- Up to 100 ft node-to-node and 50 ft node-to-device
- Demand Response option (works with OpenADR gateways)
- Controlled 120v 20A Receptacle available
- Other control features to meet code compliance

Keilton and its logo is a trademark of Litetrace; PacLights and its logo is a trademark of PacLights, LLC DLC and its logo is a trademark of DesignLights Consortium. Keilton is the qualified system name listed on the DLC Networked Lighting Controls QPL.

 Help line:
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# **NETWORKED CONTROLS for** FHUW series



### **NETWORKED** NODES ONLY

SKU		DESCRIPTION	FUNCTION	CONTROL ORDER CODE
KEILTON-WPPA102-AUX	<b>%</b>	KEILTON WPPA102-AUX DC AUX BLUETOOTH MESH NODE	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc.	-WBN

### **NETWORKED NODES WITH SENSOR**

SKU		DESCRIPTION	FUNCTION	CONTROL ORDER CODE
KEILTON-EFS106-AUX	*))	KEILTON EFS106-AUX DC AUX BLUETOOTH MESH NODE W/ PIR DLH SENSOR	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc. And, PIR occupancy & daylight (harvesting) sensing.	-WBP
KEILTON-EFS116-AUX	*))	KEILTON EFS116-AUX DC AUX BLUETOOTH MESH NODE W/ MICROWAVE PHOTOCELL SENSOR	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc. And, Microwave occupancy & photo sensing	-WBM

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