

PacLights

Commercial & Industrial Lighting

The

FLHQ<sup>TM</sup>

Series

Linear Highbay Light





## Linear Highbay Light



PROJECT \_\_\_\_\_

DATE \_\_\_\_\_

TYPE \_\_\_\_\_

PREPARED BY \_\_\_\_\_



### KEY FEATURES

- Beam Angle Selectable on all models
- Color & Power Selectable on all models
- Motion, Daylight and Network controls options
- Emergency Battery Backup options
- Multiple Mounting Options, optional Wire Guard

## TECHNICAL SPECIFICATIONS

### COMPLIANCE

#### UL Listed

UL 1598 Suitable for damp 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](http://www.designlights.org/qpl)

### LED CHARACTERISTICS

#### LEDS

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

#### Correlated Color Temperature

3500K, 4000K, 5000K selectable with a dip switch

#### Lifespan

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

#### Color Rendering Index

>82

#### Color Uniformity

PacLights' range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications 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](http://paclights.com/warranty)

### CONSTRUCTION

#### Ambient Temperature

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

#### Cold Weather Starting

The minimum starting temperature is -4 F°/-20° C

#### Housing

Durable cold rolled steel housing provides strength and uniformity. Luminaire is pre-painted to enhanced smooth finish.

#### Mounting Methods

Chain mount (40" chain included). Accessories available for aircraft cable suspended, 3/4" NPT conduit pendant, or surface mount.

#### Green Technology

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

#### Lens

Polycarbonate optics

### ELECTRICAL

#### Drivers

Input Voltage: 120-347V Universal Voltage, 50-60 Hz, optional 480v.

Power Factor : > 0.95, THD< 20%

0-10V continuous dimming, can be dim to off

#### Control Receptacle

12v DC receptacle compatible with selected motion, daylight and network controls.

#### Wattage / Input Voltage/ Input Current

Wattage/power selectable with a dip switch

MODEL	WATT. SELECTABLE	120v	208v	240v	277v	347v	480v
FLHQ/2-160/130/105	160w-130w-105w	1.48A	0.85A	0.74A	0.64A	0.51A	0.37A
FLHQ/2-240/210/180	240w-210w-180w	2.22A	1.28A	1.11A	0.96A	0.77A	0.56A
FLHQ/2-320/295/255	320w-295w-255w	2.96A	1.71A	1.48A	1.28A	1.02A	0.74A

## ORDERING INFORMATION

### FLHQ™ generation 2

FAMILY	MODEL	INPUT VOLTAGE	CCT	BEAM ANGLE	CONTROL	EMERGENCY BACKUP	MOUNTS	OTHER
FLHQ/2	-	-	-	-	-	-	-	-

Create an ordering number by populating it with the CODES listed in the tables below, following the format shown above.

**EXAMPLE:** FLHQ/2 - 240/210/180 - UV - 8CT - DX - MCP

**EXAMPLE:** FLHQ/2 - 320/295/255 - UV - 8CT - D4 - EM6000

**EXAMPLE:** FLHQ/2 - 295 - HV - 40 - D7 - MCD - EM4500 - ACS - WG

The PART SKUs, if shown in the tables below, can be ordered separately from the FLHQ.

### MODEL

\* MUST SELECT ONE

CODE	WATTAGE SELECTABLE	CODE	WATTAGE	CODE	WATTAGE	CODE	WATTAGE
160/130/105	160w/130w/105w	105	105w	180	180w	255	255w
240/210/180	240w/210w/180w	130	130w	210	210w	295	295w
320/295/255	320w/295w/255w	160	160w	240	240w	320	320w

### INPUT VOLTAGE

\* MUST SELECT ONE

CODE	INPUT VOLTAGE
UV	120/208/240/277/347v
HV	480v

### CCT

\* MUST SELECT ONE

CODE	CRI	COLOR SELECTABLE
8CT	> 82	3500K/4000K/5000K

### BEAM ANGLE

\* MUST SELECT ONE

CODE	BEAM ANGLE
DX	Selectable - Standard, Aisle, Narrow Aisle
D9	Standard, 90° x 90°
D7	Aisle, 70° x 100°
D4	Narrow Aisle, 45° x 100°

### CONTROL

\* LEAVE BLANK, or SELECT ONE

CODE	TYPE	PART SKU	SENSOR	MOUNT	INSTALL
MCP	Standalone	SE-BC-ANT64T	PIR & Daylight Threshold	Plug&Play	FIELD
MCW		SE-BC-ANT54T	Microwave & Daylight Threshold	Plug&Play	FIELD
MCD		SE-BC-ANT54TVAL	Microwave & Daylight Harvesting	Plug&Play	FIELD
WBN	Bluetooth Networked	KEILTON-WPPA102-AUX	N/A	Plug&Play	FIELD
WBP		KEILTON-EFS106-AUX	PIR & Daylight	Plug&Play	FIELD

### EMERGENCY BATTERY BACKUP

\* LEAVE BLANK, or SELECT ONE

CODE	INPUT VOLTAGE	PART SKU	WATT	EMERGENCY LUMEN	COMPATIBLE	EMERGENCY RUNTIME	INSTALL
EM4500	120-277v	EMC-30	30w	4,500 Lumen	105 to 240w models	> 90 mins	FACTORY
	480v	EMC-30-H					
EM6000	120-277v	EMC-40	40w	6,000 Lumen	All models		
	480v	EMC-40-H					
EM9000	120-277v	EMC-60	60w	9,000 Lumen			
	480v	EMC-60-H					

**MOUNTS**

\* LEAVE BLANK (v-hook and 40" chains included), or SELECT ONE

CODE	PART SKU	COMPATIBLE	TYPE	INSTALL
ACS	AC-LHB-ACS	All models	Aircraft Cable Kit, adjustable up to 120"	FIELD
ACL	AC-LHB-ACL	All models	Aircraft Cable Kit, adjustable up to 196"	
SM	AC-LHQ-2SMS	160/130/105w models	Surface Mount Kit	
	AC-LHQ-2SML	180 to 320w models		
PM	AC-LHQ-2PMS	160/130/105w models	Pendant/Conduit Mount Kit, 3/4" NPT	
	AC-LHQ-2PML	180 to 320w models		

**OTHER**

\* LEAVE BLANK, or SELECT ONE or MORE (connect with "+")

**Wire Guard**

CODE	PART SKU	COMPATIBLE	INSTALL
WG	AC-LHQ-2WGS	160/130/105w models	FIELD
	AC-LHQ-2WGL	180 to 320w models	

**Cord**

\* can be ordered in multiple of 6', such as 12FTAC, 18FTAC, etc.

CODE	PART SKU	TYPE	COMPATIBLE	INSTALL
6FTAC	OS-GL-ES-183-SJT-W-72	6' cord, 3-wires (L/N/G)	Standard Models	FACTORY
6FTAD	OS-GL-ES-185-SJT-W-72	6' cord, 5-wires (L/N/G and 0-10v dimming)		
6FTACS	OS-GL-ES-184-SJT-W-72	6' cord, 4-wires (L/N/G and Switch)	Emergency Backup Models	
6FTADS	OS-GL-ES-186-SJT-W-72	6' cord, 6-wires (L/N/G, Switch and 0-10v dimming)		

**Plug**

CODE	PART SKU	TYPE	Voltage	COMPATIBLE	INSTALL
P5_15P	PLUG-5-15P	5-15P Plug	120v	Standard Models	FACTORY
PL7_15P	PLUG-L7-15P	L7-15P Twist Lock Plug	277v	Standard Models	
PL8_20P	PLUG-L8-20P	L8-20P Twist Lock Plug	480v	480v ("HV") Models	

must also select "3-wires cord" option

PERFORMANCE

	Lumen Package	Wattage	CCT Setting	Lumen Output
Delivered Lumens, 82 CRI	15,000	105w	3500K	14,700
			4000K	15,225
			5000K	15,015
	18,000	130w	3500K	18,200
			4000K	18,850
			5000K	18,590
	23,000	160w	3500K	22,400
			4000K	23,200
			5000K	22,880
	26,000	180w	3500K	25,200
			4000K	26,100
			5000K	25,740
	30,000	210w	3500K	29,400
			4000K	30,450
			5000K	30,030
	34,000	240w	3500K	33,600
			4000K	34,800
			5000K	34,320
36,000	255w	3500K	35,700	
		4000K	36,975	
		5000K	36,465	
42,000	295w	3500K	41,300	
		4000K	42,775	
		5000K	42,185	
46,000	320w	3500K	44,800	
		4000K	46,400	
		5000K	45,760	



STANDARD FEATURES

SELECTABLE COLOR (CCT) AND POWER



Select the desired output power or light color temperature by sliding the respective Power or CCT Selection Switch left or right to the desired value. CCT can be adjusted to 3500/4000/5000K, and for each model Wattage/Lumen can be adjusted to the 3 different levels shown on the performance chart.

STANDARD FEATURES continued

SELECTABLE BEAM ANGLE

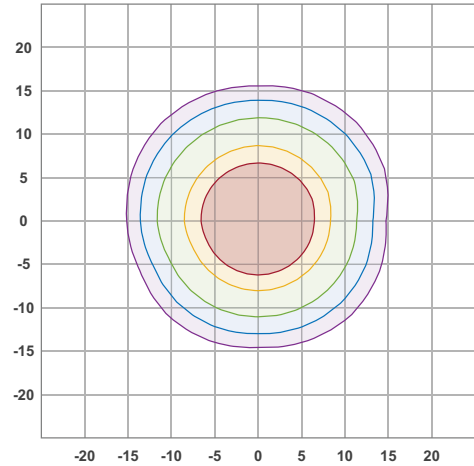
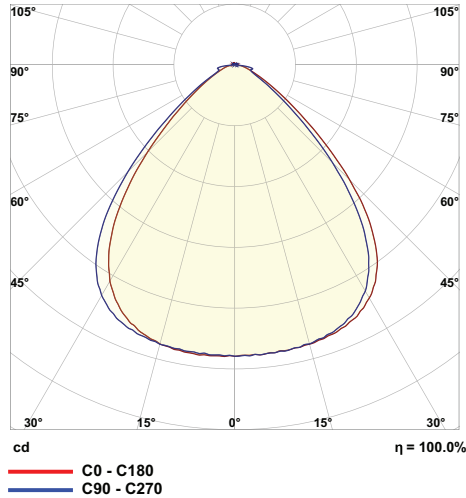
The fixture features a dip switch that enables to select the desired beam angles for different warehouse applications. (ORDERING CODE: DX)

**BEAM**  
90° x 90°

**ORDERING CODE**  
D9

**PURPOSE**  
for general warehouse spaces

STANDARD

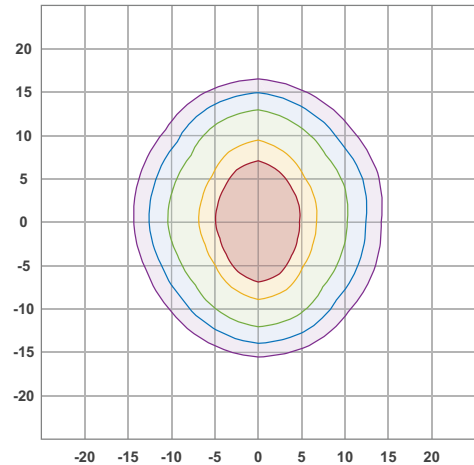
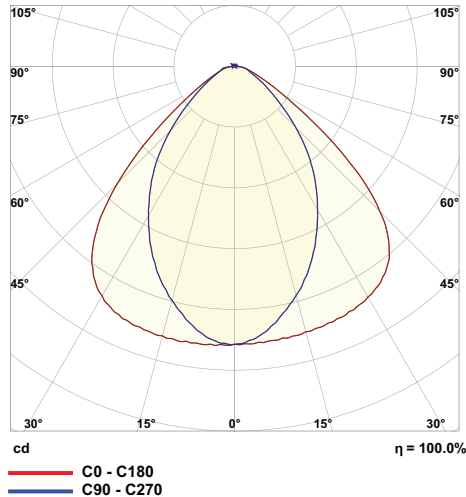


**BEAM**  
70° x 100°

**ORDERING CODE**  
D7

**PURPOSE**  
for warehouse spaces with aisle racking

AISLE

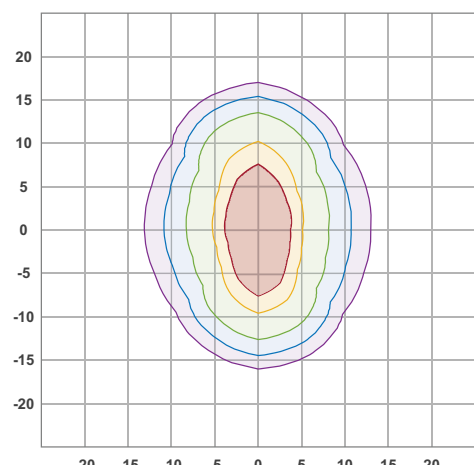
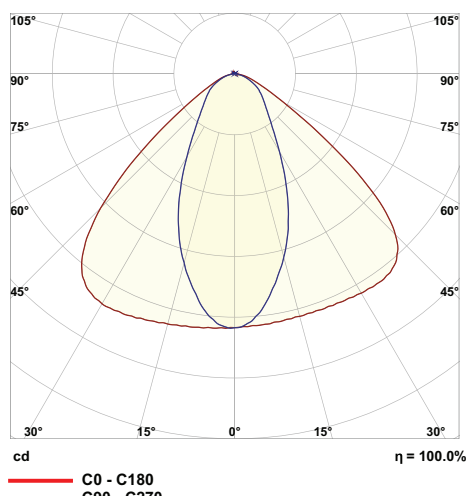


**BEAM**  
45° x 100°

**ORDERING CODE**  
D4

**PURPOSE**  
for warehouse spaces with narrow aisle racking

NARROW AISLE



CONTROL Options

STANDALONE SENSOR CONTROLS (OPTION: -MCP/-MCW/-MCD)

PASSIVE INFRARED BI-LEVEL MOTION & DAYLIGHT (OPTION: -MCP)



A PIR (Passive Infrared) sensor is capable of detecting variations in infrared radiation, which depend on the temperature and surface properties of objects in its field of view. This sensor has a 3-step dimming function, which is ideal for areas needing gradual light adjustments before a complete shutdown. Additionally, if the daylight function is activated, the sensor can turn off the light based on a preset level of ambient light. The settings for these functions can be fine-tuned using an optional wireless commissioning device.



Option: -MCP  
SKU: SE-BC-ANT64T



Option: -MCW  
SKU: SE-BC-ANT54T



Option: -MCD  
SKU: SE-BC-ANT54TVAL

MICROWAVE BI-LEVEL MOTION & DAYLIGHT (OPTION: -MCW)



Microwave occupancy control sensors are designed to detect motion through materials such as plastic, glass, and thin non-metallic substances. They are equipped with a 3-step dimming function that is ideal for areas where gradual changes in lighting are preferred before a complete shutdown. If the daylight sensor feature is activated, it can turn off the light based on predetermined levels of ambient light. The settings for these functions can be adjusted using an optional wireless commissioning device.



OPTIONAL  
wireless commissioning  
remote device  
SKU: SE-BC-RC-100

MOTION AND DAYLIGHT HARVESTING (OPTION: -MCD)



In addition to all the features offered by a microwave bi-level occupancy control, daylight harvesting control further reduces the use of electric lighting in building interiors when natural daylight is available. This function adjusts the artificial lighting levels based on the amount of natural light entering the space, enhancing energy efficiency and providing a more sustainable lighting solution.

-MCP / -MCW / -MCD Controls Specification \*default setting

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/-WBN)



Network Lighting Controls (NLC) offer Luminaire Level Lighting Control (LLC) 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 harvesting sensor
- (-WBN) Wireless bluetooth networked control (node only)



Option: -WBN  
SKU: KEILTON-WPPA102-AUX



Option: -WBP  
SKU: KEILTON-EFS106-AUX



FREE iOS/Android APP will be used to commissioning or customize settings of networked controls.

**EMERGENCY BACKUP** Option

**EMERGENCY BATTERY BACKUP (OPTION: -EMXXXX)**



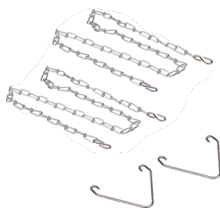
EMERGENCY BACKUP OPTION

When there is a power outage, the optional emergency backup driver and battery will power the FLHQ to an reduced brightness for at least 90 mins.

\* FACTORY INSTALLED

**MOUNTS** Option

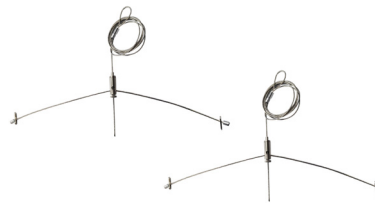
**CHAIN MOUNT (STANDARD - INCLUDED)**



One pair of chains with v-hooks are included, each length adjustable, up to 40"

\* FIELD INSTALLED

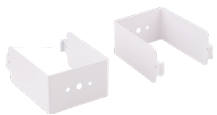
**AIRCRAFT CABLE KIT (OPTION: -AC)**



Aircraft cable for suspended mount, length adjustable up to 120" or 196"

\* FIELD INSTALLED

**SURFACE MOUNT (OPTION: -SM)**



The surface mount kit allows the FLHQ to be mounted to a flat surface or the building's beams.

\* FIELD INSTALLED

**PENDANT MOUNT (OPTION: -PM)**



The conduit mount kit allows the FLHQ to be pendant mounted to a 3/4" conduit and enables electrical wires to run through the conduit.

\* FIELD INSTALLED

**OTHER** Option

**WIRE GUARD (OPTION: -WG)**



Protect FLHQ with the impact & vandal resistant wire guard. Use this lighting accessory to reduce damage to the lens from flying debris. Easy to attach on site.

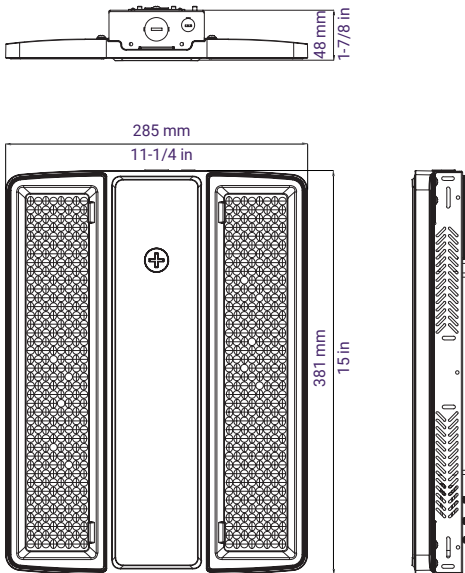
\* FIELD INSTALLED



## DIMENSIONS

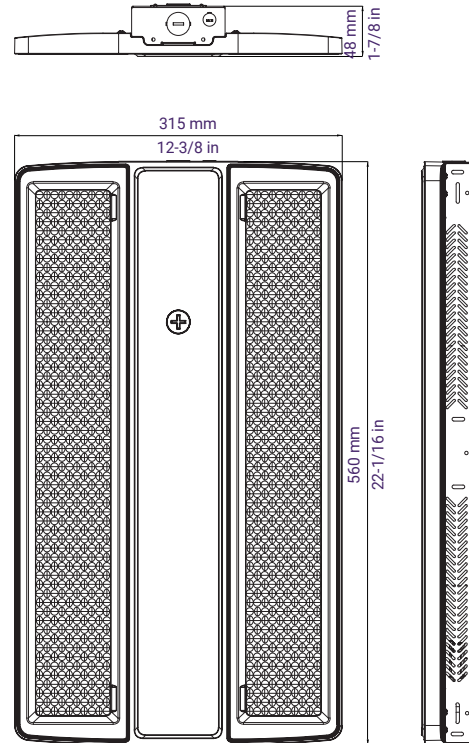
### FLHQ/2 - 160/130/105

Weight 6 lbs



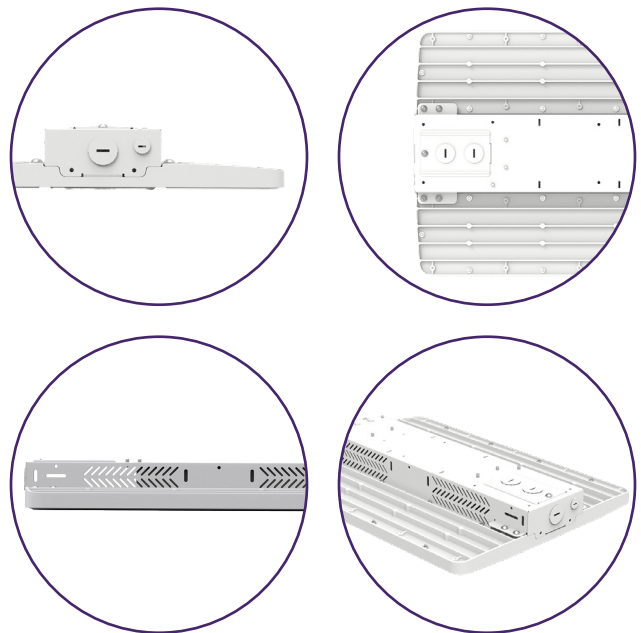
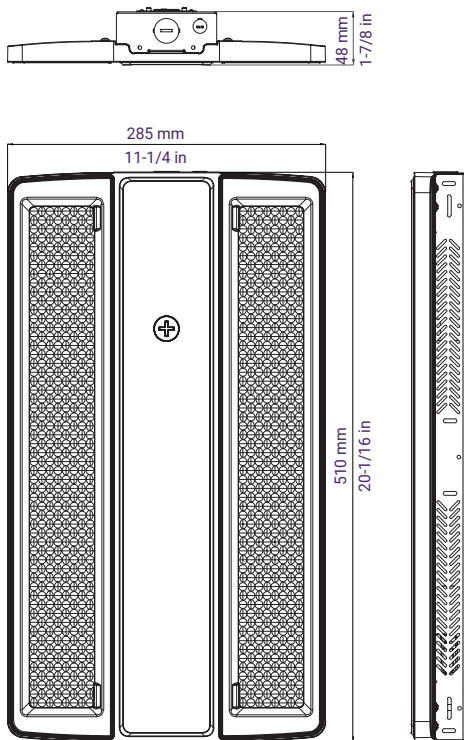
### FLHQ/2 - 320/295/255

Weight 9 lbs



### FLHQ/2 - 240/210/180

Weight 8 lbs



#### FINISH

all models White

NETWORKED CONTROL by

LIGHTING PLATFORM by

**Keilton**  
+ autani

**PacLights**

# NETWORKED CONTROLS MADE EASY

**Keilton+autani 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.

**Keilton**  
+ autani



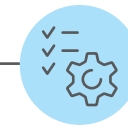
**A Cost-Effective Decentralized Architecture**

**Direct Mobile Device Provisioning**

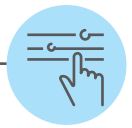
**Best-In-Class Scale, Performance & Reliability**



INSTALL



COMMISSION



CONTROL



LEARN MORE, VISIT  
[www.paclights.com/NLC](http://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+autani 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.




# NETWORKED CONTROLS for FLHQ series

**PacLights**

## NETWORKED NODES ONLY

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

## 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.	<b>-WBP</b>

Keilton+autani 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.