



BIOSMART TECHNOLOGIES™

LED High Bay Light - 90W Special Edition

BioSmart Technologies is a registered trademark of LinkPower Electronics Co. Ltd.



OVERVIEW – Special addition 90W/SE

This special edition BioSmart 90W/SE LED high bay is designed for industrial and commercial applications where reliability and performance, and maximum efficiency are important. The modular design lowers service and repair costs by 50-80% over the Life expectancy of the fixture which is 15+ years.

Every component of the BioSmart 90W/SE LED high bay has been carefully engineered to provide reliable performance and utilize the benefits of solid state lighting technology in commercial applications.

The BioSmart 90W/SE LED high bay is UL, CE and RoHS compliant. Custom certifications for U.S. and Europe are easily acquired. Current series is c-UL and has been submitted for DLC approval: the series includes the 90W, 120W, 150W, and 180W in both regular and Special Edition versions. The 90W/SE should be on the DLC registry by March 1st.

Specification

Optical parameters	
LED Chip Brand	Samsung - High Efficiency
LED Chip Part Number	2835
LED Chip Quantity	420 pieces
Color Temperature	2,500K to 6,500K
Light Efficiency(IES)	100 lm/W to 110 lm/W depending on color temp
Luminous Flux(IES)	9,000
CRI	≥80
Lens Beam Angle	110 deg or 130 deg wide angle
Electrical parameters	
Input Voltage	AC 100~277 V
Power Frequency	50~60 Hz
Total Power Consumption	90W±3%
LED Power Consumption	81W±3%
Power Efficiency	≥90%
Power Factor	≥0.95
Total Harmonic Distortion	≤15%
Competition Equivalents	
HID Replacement	250-400 W HPML
Additional parameters	
Warranty	5 years
Lifespan Expectancy	LED array: 120,000 h Driver: 60,000 h
Fixture Material	Aluminum alloy
Working Temp.	-20~+50 °C
Storing Temp./ Humidity	-40~+85 °C / 5%~100%RH
Net Weight	7.2 kg
Installation	Pendent or pole mount (pictured above)
Outer Dimensions	(ø450 × 90.5) mm
Package Dimensions	(542 × 542 × 191) mm
Back-light to Ceiling (with optional lens)	8-12% depending on lens
Dimming Characteristics	Full dimming features included
Modular construction	Modules are individually serviceable

Approvals

CE and ROHS compliant	
c-UL	For safety and efficiency
Energy Star or DLC	

Application scope

LED High bay lights replace metal halide lamps or Mercury lamps for various applications in factories and warehouses.



Factory and warehouse

Station concourse

Commercial facilities

Gym

Product Features

High efficiency

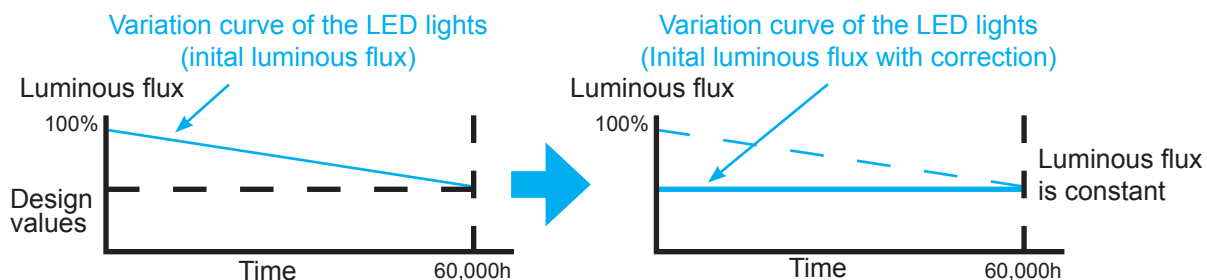
At over 100lm/W, the efficiency is greater than that of metal halide lamps and most vertically designed LED bay lights.

Long lifespan

The lifespan of the LED arrays is 5 times that of traditional metal halide lamp, greatly reducing maintenance times and costs.

Initial luminous flux correction

Correction function keeps constant luminous flux by intelligent dimming and reduces initial energy consumption, further increasing energy efficiency.

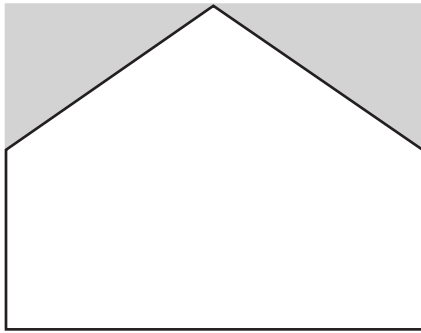


Light weight, Compact form

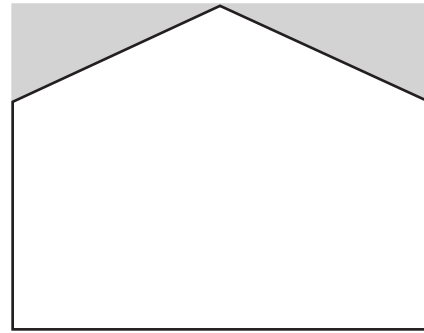
Due to the modular design, the BioSmart LED High Bay Light is lighter, making it easier and safer to install. The height of the lamp is as thin as 9 cm (2 9/16"), but varies depending on the lens. This configuration is much more compact than conventional bay lighting systems.

Emitting angle options

Light Distribution



Regular: 110 degrees



Wide-Angle: 130 degrees

Light Color Options

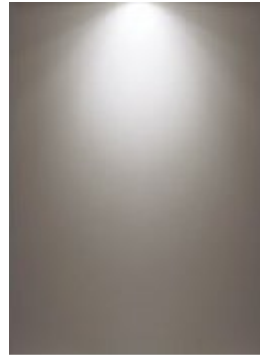
Color Temperature: 2,500K to 6,500K



2,800K



3,500K



4,000K



5,000K

Soft start function

The control module SCM is set. The light turns on with a slow start.

Intelligent dimming

The LED Bay light is easy to dim using intelligent dimming controls.

Built in driver

Easy Installation and maintenance

The LinkPower bay light is installed using the pole or pendant mounting components supplied with the fixture. The length of the power supply cord and a quick connect plug can be added during manufacturing to allow for easier connection to the main power supply, dimmer, or motion sensor.

LinkPower Electronics patented the modular bay light concept which dramatically reduces the maintenance costs of the bay light. Savings of 50-80% make for dramatic savings in maintenance costs after the warranty period expires. When the design of the LED array in conventional configurations is condensed into a single pattern, the likelihood of failure in a shorter period of time is likely. The modular concept allows the individual LED's in each array to be separated by more than ¼ inch. The larger surface area created by the modular design allows for 420 LED's spread over a larger surface area which also lowers the operating temperature. The larger surface area provides more rapid cooling capacity than a cylindrical heat sink around the driver and outer circumference of the LED array. The design of the massive aluminum chassis on the LinkPower high-bay provides direct cooling to the surface of each module in the bay light.

Maintenance Procedure.

The LinkPower modular bay light is designed to be serviced on the work bench, not on the ceiling.

The electrical connection to the power source should be of a plug-and play variety of various NEMA or UL plugs available.

The bay light is attached to the pole by a single pin in the mounting sleeve which allows for quick removal from the pole. The pendant mount is designed to unhook from the chain by a removable link.

When maintenance is required, the bay light is removed and another is installed in its place. This takes about 1-2 minutes. The bay light that requires repair is then repaired on the work bench and later rotated back into service during the next lighting maintenance cycle. The workbench service program allows each fixture to be thoroughly tested before being returned to service. The procedure for replacing any defective module and testing the unit takes less than 20 minutes. An in-house maintenance technician or contracted service provider can perform the repairs and testing on our bay light with 1 hour of video instruction and the service manual.

Patents

Claims

- Modular concept
- Driver design and functions

Chinese Patents

Issued

U.S. Patents

Pending