Job Information

Type: LED Lighting

ORDERING INFORMATION:
Example: (DHB-LED-120-50-UNV-70-WC)

DHB-LED
Series
Wattage/Lumens
120 - 120W/14400 [1]
Voltage
UNV - 122-277V
Color Temp.
41 - 4100K
50 - 5000K [2]
CRI
70 - 70
85 - 85
Options
WC - Wireless Controls
AL - Aluminum Reflector
AC - Acrylic Reflector

Application

The DHB-LED is ideal for:
- Retail spaces
- Warehouses
- Parking facilities
- General illumination
- Indoor/outdoor use

Features

- High Intensity LED Luminarie
- Uniform illumination
- High color rendering, white light
- Significant power reduction (70%) over HPS fixtures
- Extreme long life
- Robust design for high durability

SPECIFICATIONS

- LED L70 Energy Star 50,000+ hr.
- Nichia® LED system
- Aluminum and stainless steel hardware
- Integral Thermajust® technology for extreme environments
- Integral aluminum heat sink. Patented intelligent thermal design uses metal core board (MCPCB)
- UL Listed Dimmable (0-10VDC sync)
- Power Supply Unit (PSU)
- CRI 70, +3500°K - 5100°K color temperatures standard
- PF >0.95, THD < 10%
- Operating temperature -40°C - 50°C
- DLC listed
Advanced Wireless Lighting Control using Daintree Networks with the DECO DIGITAL CLOUD

Wireless lighting control enabled through:

Daintree Networks Wireless Mesh Network
Interconnected devices provide robust, self-healing, and reliable communications to and from any access point.

Open Standard Zigbee™ Enabled
Interoperable with other third-party Zigbee™ enabled wireless devices such as motion and daylight sensors and plug load devices.

ControlScope User Interface
Set, manage, and update lighting control schedules and configurations

ControlScope Manager:
- Field/Remotely Upgradeable
- Dashboard that summarizes control network status
- Scheduling for On/Off and dimming
- Set multiple zones or areas
- See real-time energy use and trends
- View and print reports and usage metrics
- Floor plan view for simple overlay of lighting control zones.
- Alert and alarm triggers based on system events
- Define user access and restrictions

Wireless Mesh Network:
Each device communicates two-way with every other device and can relay messages for its neighbors. This translates to:
- Low Cost
- Low Complexity
- Scalability
- Reliability
- Flexibility
- Bi-directional

Control Area 1

Control Area 2

Wireless Adaptor

System Controller

Wireless Daylight Sensor

Wireless Motion Sensor

Wireless Dimming Switch

Zigbee™ wireless protocol
Wireless Lighting Control

In commercial buildings, lighting accounts for up to 40% of total energy cost. Reducing this energy consumption has become a major goal for building owners, governments, utilities and many other stakeholders. It’s no secret that replacing existing lights with more energy-efficient lighting sources (such as LED) is one of the ways to reduce this massive pool of energy use—but efficiency is only the start.

An even greater level of energy reduction comes from turning off lights when they are not needed, optimizing light levels to suit worker needs, and reducing overall demand for lighting energy. Improving system-wide control over lighting is the best way to ensure that lighting energy is automatically reduced as much as possible. Lighting Control solutions, based on a variety of technologies, have been proven to reduce lighting energy consumption in commercial and industrial buildings by up to 70%. These solutions have been limited in the past by cost, complexity and applicability, but new wireless technologies are providing ways to expand the capabilities of Lighting Control and offer them to a wider set of customers.

Wireless Mesh Network

Wireless mesh networks provide many benefits for lighting control. Some of the most important features of wireless mesh networking include the following:

- **Low Cost:** Installation and ongoing management costs are greatly reduced without the need to run control wires from each device back to the network’s central controller.
- **Low Complexity:** Wireless allows users to avoid the complexity of connecting wires from hundreds (or thousands) of devices back to a single controller.
- **Scalability:** Wireless mesh solutions can support more devices over greater distances per controller than wired ones, which makes wireless ideal for multi-room and multi-floor installations.
- **Reliability:** Wireless mesh networks add reliability by offering multiple communication routes for any transmitted message.
- **Flexibility:** Devices can be installed where they will provide maximum benefit instead of where it is easiest to run control wires. Devices are also grouped into “zones” using software rather than hard wiring.
- **Bi-directional:** Bi-directional communications enables the capture and delivery of critical energy usage data.

Open Standard Zigbee™ Enabled

ZigBee is an open standard that was created to address the market need for a cost-effective, standards-based wireless networking solution that supports low data-rates, low-power consumption, security and reliability. This makes it ideal for a wide set of machine-to-machine and control applications such as commercial building and home automation, lighting control, energy management and telecommunication services.

The robustness of the ZigBee standard, combined with the benefits of wireless mesh networking, make ZigBee ideally suited for commercial building automation and lighting control solutions. This has made it the wireless standard of choice for today’s emerging commercial lighting control solutions.

You can find out more about ZigBee from the ZigBee Alliance web site at www.zigbee.org.

ControlScope User Interface

Daintree Networks’ ControlScope™ Manager (CSM) is a full-featured Lighting Management application that delivers complete control of commercial lighting functionality into the hands of facilities managers and other users. CSM is the primary user interface for Daintree-based wireless lighting control solutions that enable powerful, simple and low-cost access to energy-saving strategies such as daylighting, occupancy sensing and demand response.

Built on Daintree’s ControlScope wireless platform, CSM is an easy-to-use graphical tool with advanced functionality for real-time energy management and lighting control. CSM provides Web-based access to all the system and device management, enterprise-wide and individually addressable lighting control, and energy measurement and monitoring functions needed to deliver intelligent building control.

For more information on DaintreeNetworks, please visit www.daintree.net.