Project		Catalog #		Type	
Prepared by		Notes		Date	

Ephesus

AirMesh Hub

Wireless Lighting System Controls

Typical Indoor/Outdoor Applications

• Professional Stadiums & Arenas University/Collegiate Stadiums & Arenas • K-12 Stadiums & Arenas • Game Fields • Practice Fields • Multi-use Recreational & Municipal Fields • Public Assembly & Convention Centers • Gymnasiums & Field Houses • Unmanned Sports Facilities

Interactive Menu

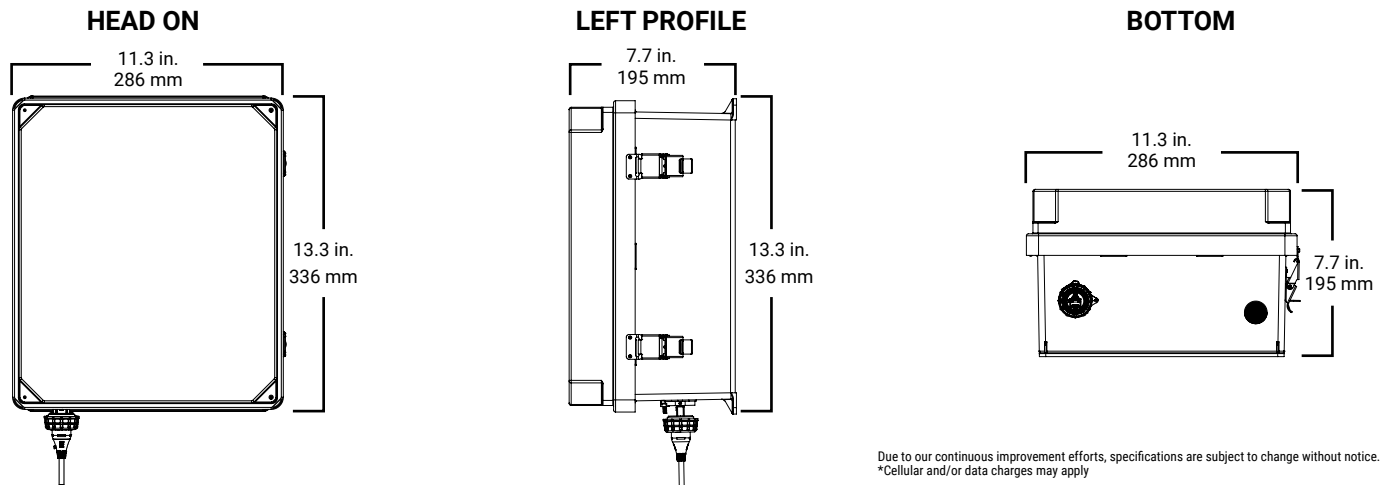## Product Certification

Product Overview

Designed for optimal control and efficiency, the AirMesh Hub is a cornerstone of advanced lighting solutions for athletic and event facilities. This robust device enables facility directors and athletic directors to effortlessly manage lighting with its intuitive wireless, push-button interface, suitable for environments ranging from municipal ballparks to collegiate arenas and professional sports complexes.

Encased in a durable NEMA 4X enclosure, the AirMesh Hub ensures reliable operation in both indoor and outdoor settings, standing up to the challenges of diverse weather conditions. The system supports up to 25 programmable scenes accessible via straightforward five-button control or dynamic and sequential ProFX scenes via the dashboard allowing for precise management of lighting across different zones or throughout the entire venue.

The AirMesh Hub's user-centric design facilitates quick adjustments and on-the-fly control, which are essential during varied sports events and activities. Installation is streamlined and non-intrusive, ensuring that your facility can upgrade without significant downtime, enhancing both athlete performance and spectator experience with superior lighting conditions.

Empower your facility with the AirMesh Hub, where advanced technology meets user simplicity, making it an indispensable tool for modern sports and event managements.

Dimensional Details

HEAD ON

11.3 in.
286 mm

13.3 in.
336 mm

LEFT PROFILE

7.7 in.
195 mm

13.3 in.
336 mm

BOTTOM

11.3 in.
286 mm

7.7 in.
195 mm

Due to our continuous improvement efforts, specifications are subject to change without notice.
*Cellular and/or data charges may apply

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Top Product Features

- Five-button, pre-programmed switch provides easy control of all lights at specified dimming levels (0%, 25%, 50%, 75%, 100%)
- Can be installed anywhere you need wireless, push-button control
- Can communicate via LAN connection, Wi-Fi, or through a cellular network*
- Weather-protected for outdoor venues
- Includes internal surge protection
- Enables Static, Dynamic, and ProFX Scenes.
- Options to meet Trade Agreements Act requirements

AirMesh Hub Specifications

Dimensions	13.3in x 11.3in x 7.7in (336mm x 286mm x 196mm)
Input Power	Outdoor rated power supply 110 - 277VAC; 11W max, 6kV surge protection
Operating Environment	Outdoor rated at -40°C to +54°C, IP65 (when latched)[1][2]
Cellular	Verizon 4G LTE
Wi-Fi	802.11 b/g/n
Radio	2.4 GHz; 802.15.4 +20dBm Transmit Power -105 dBm Receive Sensitivity
Certifications	FCC/IC UL 60730-1 CSA E60730-1 ROHS 3:2011/65/EU(2015/863)

AirMesh Function

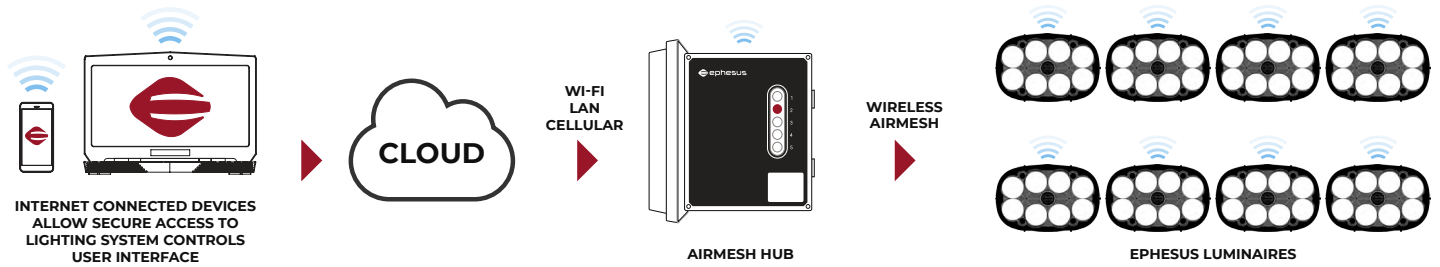| AirMesh Function	Description
Maximum number of lights controlled by hub	Up to 1000
Maximum distance of fixture from location of hub	500 feet
Maximum allowable distance from one fixture to next	500 feet
Maximum number of programmable pre-set scenes	25 (5 per button)
Individual light control	Preprogrammed via 5-button hub. Additional scenes and light control obtained via web interface with hub
Health monitoring[3]	Real-time monitoring of lighting status at the fixture and system level, outage notifications, storage of power consumption, temperature and other system parameters which can be retrieved for later analysis*
Remote Connectivity	Web interface can be accessed by direct Wi-Fi connection or through internet via Ethernet or built-in cellular*
Alerts	Email alerts available when connected to internet via Ethernet or built-in cellular*
Users	User and administrative accounts with multiple permission levels available
Sensors	Voltage-sourcing sensors can be added to the system to turn lights on/off with daylight or occupancy sensors. Multiple output levels in response to light sensors (daylight harvesting)
Map View	Ability to view light state (on/off/alarm) in graphical map/satellite view
Scheduling	Ability to schedule recurring events at fixed times or based on astronomical clock
Compatibility	Ability to add control modules to existing lighting fixtures to add Air-Mesh functionality to entire facility

Notes:
Due to our continuous improvement efforts, specifications are subject to change without notice.
[1] To maintain IP rating of the unit, it must be installed with a IP65/NEMA 4X fitting at the power and ethernet entry points
[2] The AirMesh Hub holds a rating of IP65 for outdoor when the door is latched and all entry ports (power and Ethernet) are properly sealed. Failure to properly seal entry ports and latch the door will void the IP65 rating.
[3] Refer to the functionality of your Ephesus fixture for health monitoring capability.

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Example System Topology (Wireless AirMesh Controls)

Example system topology showing the LUMA**SPORT 8** System in a Wireless AirMesh Control Installation.
Note: Laptop and mobile device not included. A cellular network connection requires a cellular carrier network plan.

REMOTE ACCESS

INTERNET CONNECTED DEVICES ALLOW SECURE ACCESS TO LIGHTING SYSTEM CONTROLS USER INTERFACE

CLOUD

WI-FI
LAN
CELLULAR

AIRMESH HUB

WIRELESS AIRMESH

EPHESUS LUMINAIRES

ON SITE ACCESS

INTERNET CONNECTED DEVICES ALLOW SECURE ACCESS TO LIGHTING SYSTEM CONTROLS USER INTERFACE

WI-FI
LAN
CELLULAR

AIRMESH HUB

WIRELESS AIRMESH

EPHESUS LUMINAIRES

Example Order

Part Numbers	Description
CBSSW-450-002E-DB	5-Button AirMesh Hub Site Controller / Dynamic Scenes: (Normal/Fast) Paparazzi, Sparkle, Random + Dimming
REMOTE-BASE	Remote Commissioning up to 75qty fixtures / +1-year full cloud access subscription.
LM-BASE-9Y	+9-year Subscription License
PRO-FX	ProFx Sequential Scenes License
SER-PROFXDEV	ProFx Sequential Scenes Commissioning Service
SER-COLOR	RGB Color Commissioning Service

Wireless AirMesh Hardware

SELECTION	PART NUMBER	DESCRIPTION
	CBSSW-450-002E-DB	5-Button AirMesh Hub Site Controller Dynamic Scenes: (Normal/Fast) Paparazzi, Sparkle, Random + Dimming

Advanced Features:

SELECTION	PART NUMBER	DESCRIPTION
	PRO-FX	ProFx Sequential Scenes License **NOTE**: Cloud access required to update ProFx functionality.
	SER-PROFXDEV	ProFX Sequential Scenes Commissioning Service
	SER-COLOR	RGB Color Commissioning Service
	SSUDP-001	UDP integration with 3rd party systems Commissioning Service

Remote Commissioning Setup Services

SELECTION	PART NUMBER	DESCRIPTION
	REMOTE-BASE	Remote Commissioning up to 75qty fixtures and +1-year full cloud access subscription.
	GLP-SER-REMOTE	Remote Commissioning up to 50qty fixtures
	SER-REMOTE-DEV	Per device commissioning fee above threshold **NOTE**: In-Person Commissioning Available. Contact Ephesus for options.

Additional Commissioning Setup Services

SELECTION	PART NUMBER	DESCRIPTION
	SER-REMOTE1; SER-REMOTE2; SER-REMOTE4	System Expansion Setup
	SER-PROFXDEV2	ProFx Additional Field System Setup

Full Cloud Based Software Access Subscriptions

Full Cloud Access - Includes One Cellular Access line for One Gateway, Progressive web app; Map-based management; RGBW Capabilities; Multi-site management; Single UI across multiple gateways; Different user access levels; Database backup; Power dashboard.

Full Cloud Access Expansion Packages:

SELECTION	PART NUMBER	DESCRIPTION
	LM-BASE-4Y	+4-year Subscription License
	LM-BASE-9Y	+9-year Subscription License

First-Time Activation Full Cloud Access Cloud Subscription Packages:

SELECTION	PART NUMBER	DESCRIPTION
	LM-BASE-5Y	5-year Subscription License
	LM-BASE-10Y	10-year Subscription License

Additional Full Cloud Access Subscription Options:

	>1qty AirMesh Hub Subscription License **NOTE**: System configuration can vary, and subscription cost is based on quantity of AirMesh Hubs and Cloud Subscription Term. Contact Ephesus for options.

COOPER Lighting Solutions

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Specifications and dimensions
subject to change without notice.

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