

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

- AirMesh Hub page 1
- Product Overview page 2
- Dynamic Scenes page 3

#### Product Certification

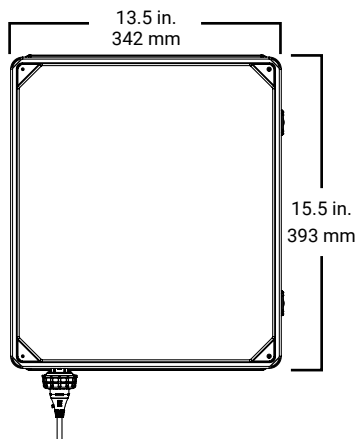


#### Top Product Features

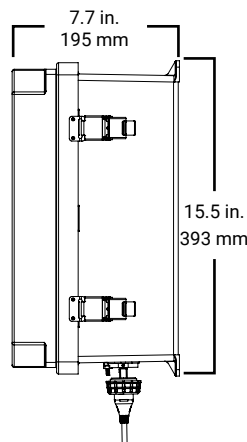
- Can be installed anywhere you need wireless, push-button control
- Five-button, pre-programmed switch provides easy control of all lights at specified dimming levels (0%, 25%, 50%, 75%, 100%)
- Can communicate via LAN connection, Wi-Fi, or through a cellular network\*
- Weather-protected for outdoor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

#### Dimensional Details

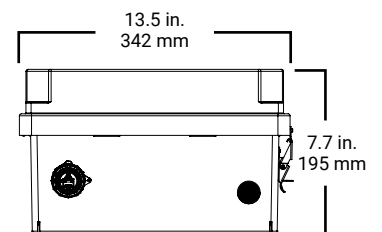
##### HEAD ON



##### LEFT PROFILE



##### BOTTOM



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



## Product Overview

The AirMesh Hub is an Ephesus component that can be installed anywhere you need wireless push-button lighting control, such as municipal ballparks, hockey arenas, basketball facilities, and other multi-use complexes. The AirMesh Hub is easy for certified electricians to install in both indoor and outdoor applications that's contained in the NEMA 4X enclosure. The 5-button 25 scenes (5 per button) controller allow for local manual access to facility lighting across specific zones or over the entire lighting installation. The AirMesh Hub enables quick and simple access to a switch station that can be programmed with unlimited options to meet the needs of the end-user.

## AirMesh Hub Specifications

Dimensions	15.5" x 13.5" x 7.7" (393 x 342 x 195 mm)
Input Power	Outdoor rated power supply 90-120VAC; 8W max, 6kV surge protection
Operating Environment	Outdoor rated at -20°C to +55°C, IP65 (when latched)
Cellular	Verizon 4G LTE
Wi-Fi	802.11 b/g/n
Radio	SNAP 2.4GHz 802.15.4 Wi-Fi 2.4GHz 802.11 b/g/n
Certifications	FCC/IC; Tested to CAN/CSA C22.2 No. 60950-1/A2:2014 and UL 60950-1/R:2014-10
Ratings	IP65 <sup>1 2</sup>

## 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 <sup>3</sup>	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.

<sup>1</sup>To maintain IP rating of the unit, it must be installed with a IP65/NEMA 4X fitting at the power and ethernet entry points

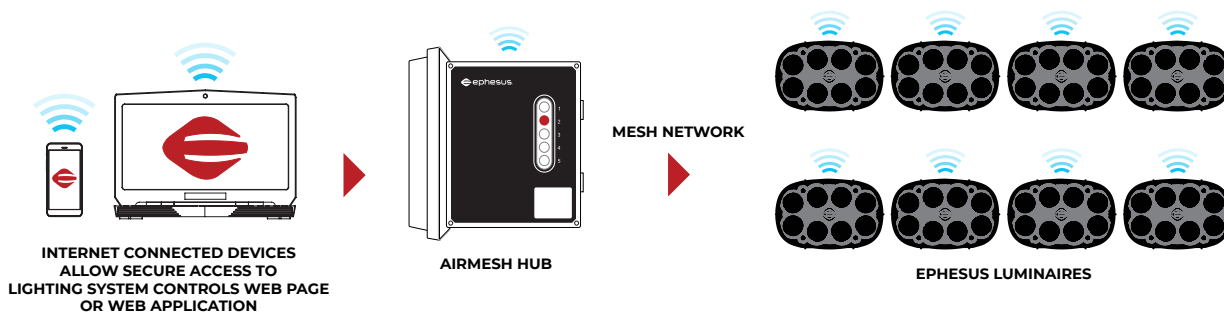
<sup>2</sup>The AirMesh Hub holds a rating of IP65 for outdoor when the door is latched and all entry ports (power and Ethernet) are properly sealed. Failure to properly seal entry ports and latch the door will void the IP65 rating.

<sup>3</sup>Refer to the functionality of your Ephesus fixture for health monitoring capability.

## Example System Topology (Wireless AirMesh Controls)


Example system topology showing the LUMASPORT System in a Wireless AirMesh Control Installation.

Note: Laptop or mobile device not included. A cellular network connection requires a cellular carrier network plan.



## AirMesh Dynamic Scenes

The AirMesh Hub control system can provide dynamic scenes and effects. You can easily create an unlimited combination of static scenes. For example, create scenes to spotlighting national anthems, player introductions, intermissions, blackout your venue, maintenance and egress lighting scenes.

Ephesus Fixture	Luminaire Type	Static Scenes	Dynamic Scenes
<b>LUMASPORT 8</b> 	White LED	<ul style="list-style-type: none"> <li>• ON/OFF</li> <li>• Dim 10-100%</li> <li>• Blackout</li> <li>• Individual Light Fixture Control</li> <li>• Unlimited Programmable Static Scenes</li> </ul>	<ul style="list-style-type: none"> <li>• Paparazzi [Standard &amp; Fast]</li> <li>• Sparkle [Standard &amp; Fast]</li> <li>• Random</li> </ul>
<b>LUMASPORT 16</b> 	White LED	<ul style="list-style-type: none"> <li>• ON/OFF</li> <li>• Dim 10-100%</li> <li>• Blackout</li> <li>• Individual Light Fixture Control</li> <li>• Unlimited Programmable Static Scenes</li> </ul>	<ul style="list-style-type: none"> <li>• Paparazzi [Standard &amp; Fast]</li> <li>• Sparkle [Standard &amp; Fast]</li> <li>• Random</li> </ul>
<b>PRISM RGBA</b> 	RGBA Color LED	<ul style="list-style-type: none"> <li>• ON/OFF</li> <li>• Dim 0-100%</li> <li>• RGBA Color Mixing</li> <li>• Blackout</li> <li>• Individual Light Fixture Control</li> <li>• Unlimited Programmable Static Scenes</li> </ul>	<ul style="list-style-type: none"> <li>• Paparazzi With Color [Standard &amp; Fast]</li> <li>• Pinwheel With Color</li> <li>• Pinwheel 5 With Color</li> <li>• Sparkle With Color [Standard &amp; Fast]</li> <li>• Random With Color</li> </ul>
<b>ALL FIELD</b> 	White LED	<ul style="list-style-type: none"> <li>• ON/OFF</li> <li>• Dim 0-100%</li> <li>• Blackout</li> <li>• Individual Light Fixture Control</li> <li>• Unlimited Programmable Static Scenes</li> </ul>	<ul style="list-style-type: none"> <li>• Paparazzi Standard &amp; Fast]</li> <li>• Pinwheel</li> <li>• Pinwheel 5</li> <li>• Sparkle [Standard &amp; Fast]</li> <li>• Random</li> </ul>
<b>LUMADAPT 8</b> 	Integrated White / RGBA Color LED	<ul style="list-style-type: none"> <li>• ON/OFF</li> <li>• Dim 0-100%</li> <li>• RGBA Color Mixing</li> <li>• Color Temperature (CCT) Tuning</li> <li>• Beam Angle Tuning</li> <li>• Blackout</li> <li>• Individual Light Fixture Control</li> <li>• Unlimited Programmable Static Scenes</li> </ul>	<p><b>White &amp; RGBA Light</b></p> <ul style="list-style-type: none"> <li>• Paparazzi [Standard &amp; Fast]</li> <li>• Sparkle [Standard &amp; Fast]</li> <li>• Random</li> </ul>

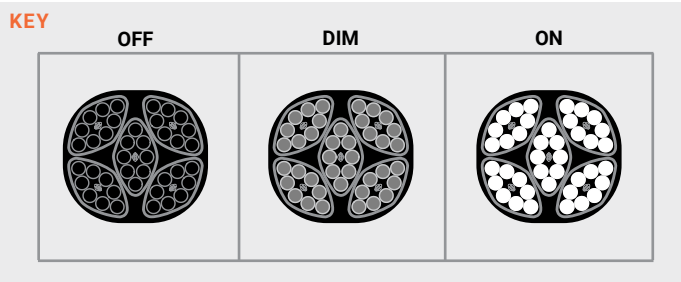


## ALL FIELD Dynamic Scenes

### White LED

Lumen(lm) Output:

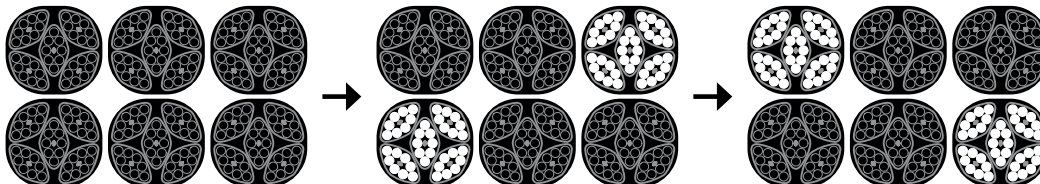
>48,000 | >64,000 | >85,000



#### Paparazzi [Standard & Fast]<sup>1</sup>

Each light illuminates briefly in a random manner that resembles paparazzi flash bulbs.

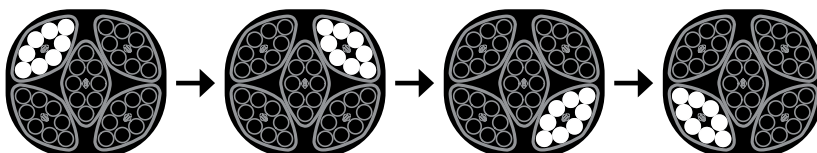
When entering this mode, all fixtures will immediately turn OFF. Fast paparazzi fires faster than standard paparazzi.



#### Pinwheel

The outer LED modules on each fixture illuminate individually and rapidly in a rotating manner.

When entering this mode, the center LED module on each fixture will turn OFF. All but one of the four outer LED modules will turn off. Every 100 milliseconds, the next LED module (clockwise) will turn on to 100% and the previous LED module will turn off.



#### Pinwheel 5

All LED modules on each fixture illuminate individually and rapidly in a rotating manner.

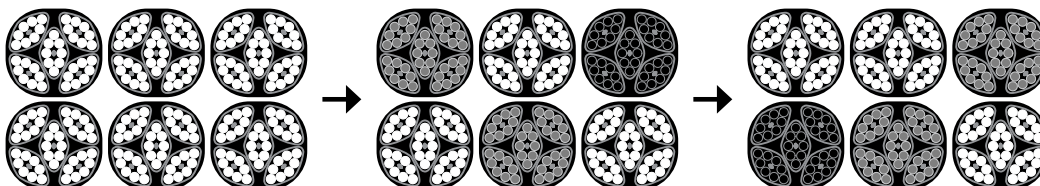
When entering this mode, all but one of the outer LED modules will turn off. Every 100 milliseconds, the next LED module (clockwise) ending with the center LED module will turn on to 100% and the previous LED module will turn off.



#### Sparkle [Standard & Fast]<sup>2</sup>

Each light illuminates briefly in a random manner mimicking a glittery, sparkling appearance.

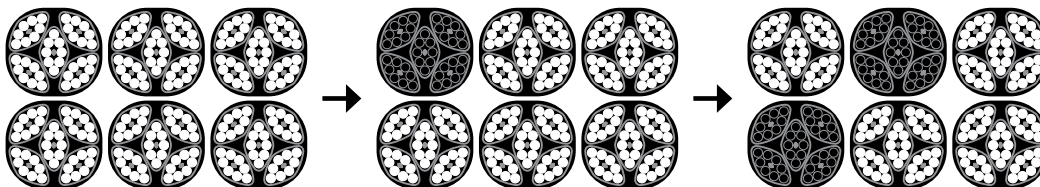
When entering this mode, all fixtures will immediately turn ON. Fast Sparkle fires more rapidly than standard sparkle.



#### Random

Lights illuminate throughout the installation in a random manner.

All fixtures will immediately turn ON to a random dimming level between 0 and 100%. Every 100 milliseconds, each fixture will change to another random dimming level.



Unless otherwise stated for a particular scene affects independently and the scene will remain in operation until another scene or mode of operation is selected.

<sup>1</sup>For each flash period, a light will have a 10% chance of turning on under Paparazzi, and a 20% chance under Fast Paparazzi. For each flash period, a light will have a 10% chance of turning on under Paparazzi, and a 20% chance under Fast Paparazzi.

<sup>2</sup>For each flash period, a light will have a 10% chance of turning on under Sparkle, and a 20% chance under Fast Sparkle.