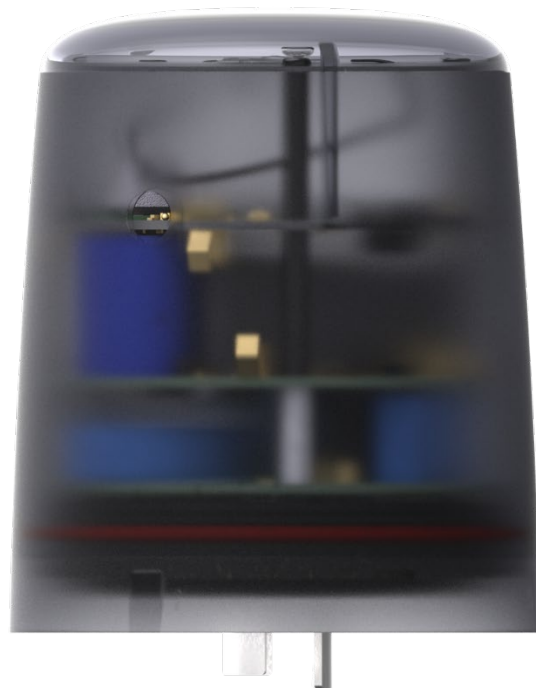


# Installation Manual

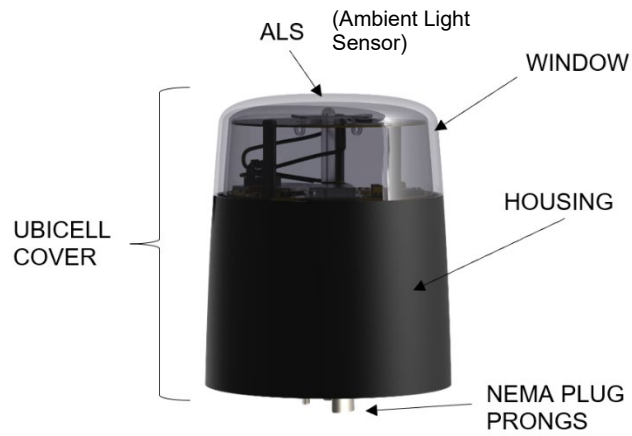
**UbiCell UG CAT-M**

**UbiCell UG CAT-1**

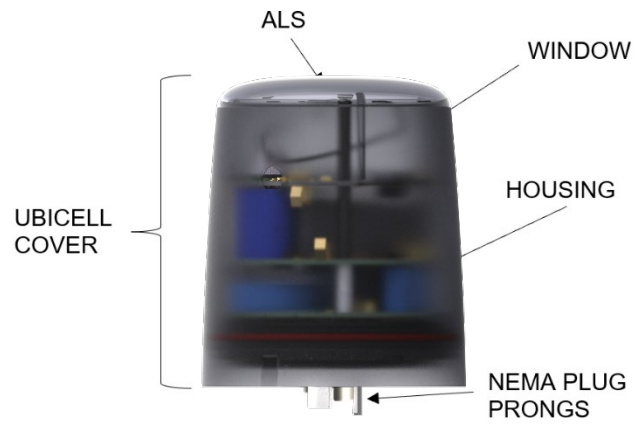


# UbiCell Unboxing

UbiCell UG CAT-1



UbiCell UG CAT-M



## Tools Needed for Installation (not included)

- Glove or other blacked-out material for testing functionality

## Safety Information



### CAUTION

- Before installing a UbiCell, ensure the UbiCell has an adhesive backed gasket installed on the underside of the product.
- Before installing a UbiCell, ensure that the top of the unit is free from contact with obstructions (billboards, tree limbs, electrical wiring, etc.).
- When connecting the UbiCell to a NEMA receptacle, ensure that the prongs are properly aligned with their corresponding insertion holes.
- Do **not** remove the UbiCell cover, as this will void the warranty. The UbiCell Lighting Controller is not a user serviceable item.
- The external NEMA UbiCell is intended **only** for outside placement on top of a light post fixture. It should **never** be installed inside a fixed closure or cabinet.
- The external NEMA UbiCell should **not** be installed in non-ventilated areas.
- The UbiCell is subject to atmospheric/environmental conditions and its successful operational performance requires a continuous, clear line-of-sight propagation path with its gateway or access point. Interference to its line-of-sight propagation path (e.g., atmospheric conditions or physical obstacles) can adversely impact its operational performance.
- Be overly cautious of electrical safety while making alterations to the UbiCell or the luminaire housing during installation steps.



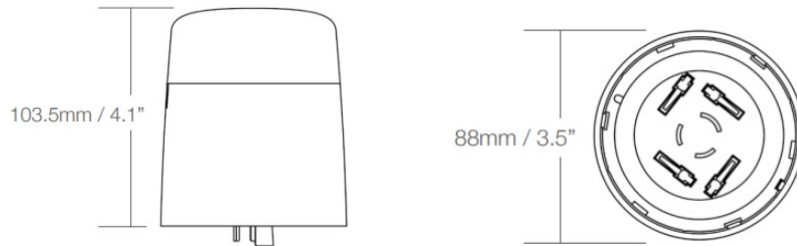
### WARNING

- Electrical bodily injury or fatality can occur during installation activity if done incorrectly. Before starting the installation procedures described in this installation guide, power **must** be turned off at the installation site.
- The UbiCell must **only** be connected to power sources using the proper electrical parameters: 100-480VAC, and 50-60Hz (see Appendixes A-C for proper wiring connectivity).
- Connectors **must** be free from moisture and debris to avoid damage or poor performance of equipment.
- If the UbiCell has been dropped or damaged, it should **not** be installed.
- The installation should **only** be performed by a certified electrician.



# Technical Specifications & Dimensions

## UbiCell Dimensions



## UbiCell Technical Specifications

<b>RECEPTACLE:</b>	NEMA 7-PIN
<b>PURPOSE OF CONTROL:</b>	OPERATING CONTROL
<b>CONSTRUCTION OF CONTROL:</b>	PLUG-IN - LOCKING TYPE
<b>OPERATING VOLTAGE:</b>	UP TO 506V
<b>IMPULSE VOLTAGE:</b>	4000V
<b>ACTION TYPE:</b>	TYPE 1
<b>POLLUTION DEGREE*:</b>	3
<b>STANDARD WARRANTY:</b>	5 YEARS
<b>RATING:</b>	OUTDOOR/IP66 Enclosure
<b>CERTIFICATIONS*:</b>	<b>UL 60730</b> <b>FCC ID: XMR202008EG91NAXD (QUECTEL Model: EG91)</b> <b>FCC ID: XMR2020BG95M2 (QUECTEL Model: BG95)</b>

**\*Pollution Degrees Explained:**

**Pollution Degree 1**

No pollution or only dry, non-conductive pollution occurs. The pollution has no influence.

**Pollution Degree 2**

Only non-conductive pollution occurs except that occasionally a temporary conductivity caused by condensation is to be expected.

**Pollution Degree 3**

Conductive pollution occurs or dry non-conductive pollution occurs which becomes conductive due to condensation which is to be expected.

**Pollution Degree 4**

Continuous conductivity occurs due to conductive dust, rain or wet conditions.

**\*Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by UbiQuia could void the user's authority to operate the equipment.



## Installing the UbiCell

For a more detailed demonstration of UbiCell installation, watch the [UbiCell Installation Video](#).

### STEP 1 Check NEMA Receptacle

Check that all contacts on the NEMA receptacle are clean. Check that the NEMA receptacle does not rotate. If the receptacle rotates, ensure it is locked in place before installing.

***NOTE:** If the receptacle cannot be locked in place, then it must be held in place during UbiCell installation.*



### STEP 2 NEMA Connector Options

Decide which NEMA option diagram is applicable to the unit and install.

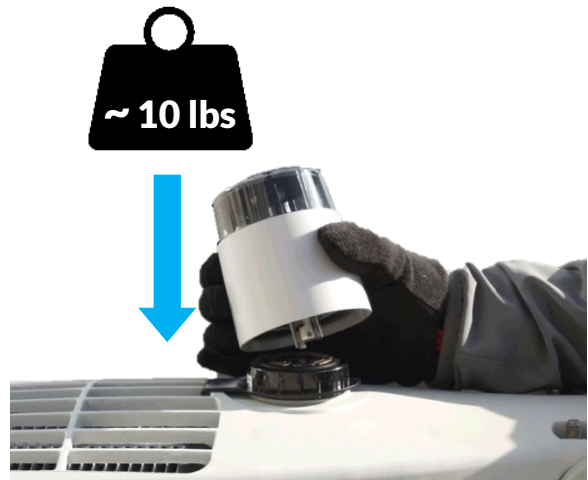
***NOTE:** See page 6 for NEMA connector options.*

### STEP 3 Install the UbiCell

Insert the UbiCell into the NEMA socket and **apply downward pressure** while turning **clockwise about 15 degrees** until rotation completely stops.

***NOTE:** Optimal communication can be achieved with a 10ft / 3m minimum obstruction clearance around the device.*

***NOTE:** Watch the [NEMA Connector Types video](#) for a demonstration on preparing the NEMA receptacle for installation.*



#### STEP 4 Vertical Pull Test

Lift up vertically on the UbiCell to confirm that the hooks are fully engaged.

#### STEP 5 Dimming Test

When correctly installed, the UbiCell should follow the following flash patterns based on expected functionality:

**If the luminaire supports dimming functionality**, there will be 3 flashes (on/off) for one second each. **If dimming is not available**, there will be no flashes.

If the expected results are not achieved, check the line power. If power is confirmed, perform a second vertical pull test to validate that the pins were properly rotated into the sockets in Step 3. If proper installation is confirmed, then mark the UbiCell for return and install a new UbiCell.

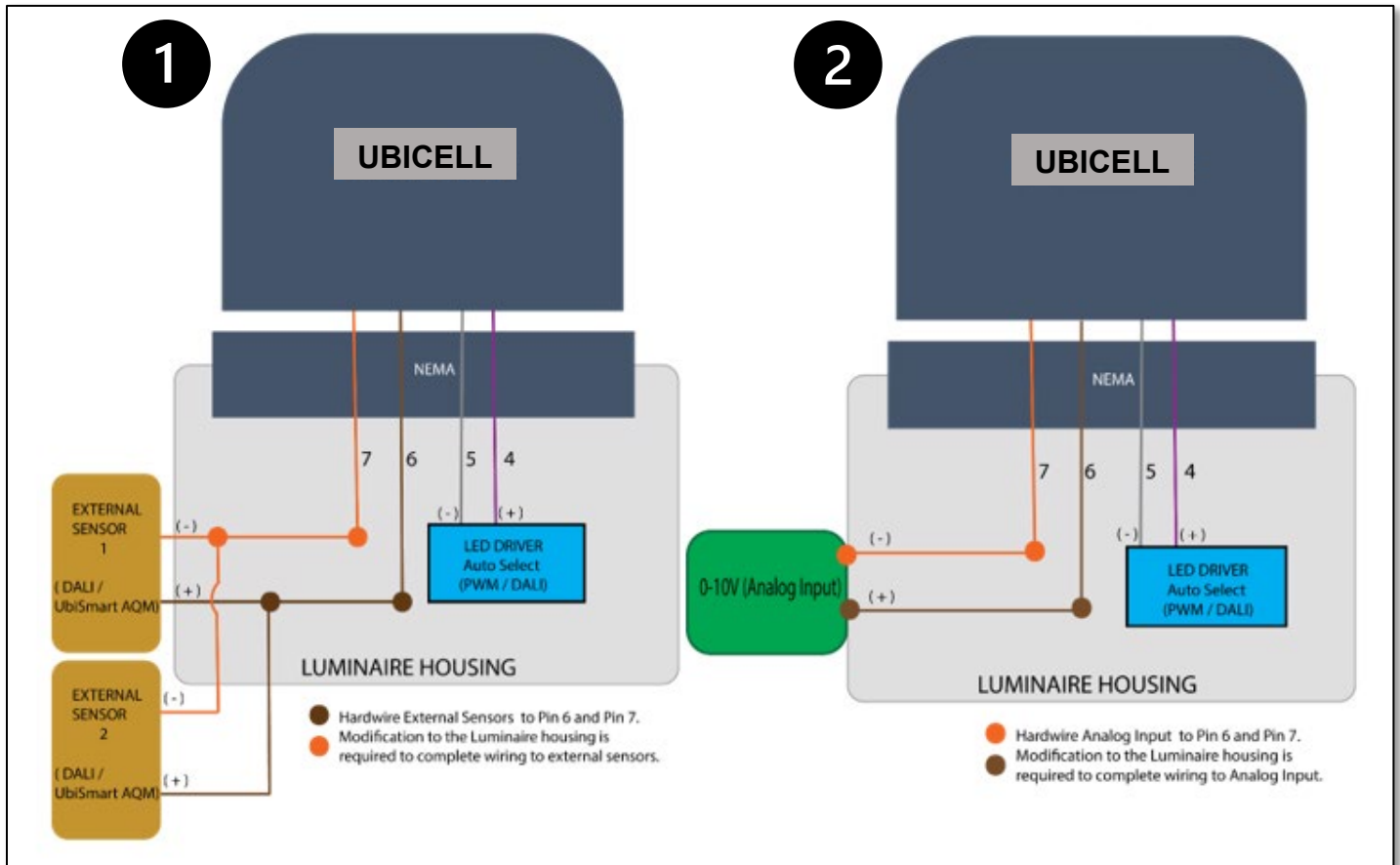
#### STEP 6 Glove Test

Cover the UbiCell or ALS entirely with a glove or other blacked-out material to trigger photocell and turn on the lamp.

If the glove test fails, check the line power. If power is confirmed, perform a second vertical pull test to validate that the pins were properly rotated into the sockets in Step 3. If proper installation is confirmed, then mark the failed UbiCell for return and install a new UbiCell.



## NEMA Connector Options



**1** DALI or PWM (0-10V) Auto select with option for DALI / External Sensors / UbiSmart AQM use

**2** DALI or PWM Auto select with option for Analog Input 0-10V

**NOTE:** Pins 6 & 7 of the NEMA ANSI C136.41 twist-lock photocell connector must never be plugged into a connection other than the DALI bus specific to Ubiqquia use for external sensors; that includes removing any connections from the luminaire that may have come pre-made, as any non-DALI standard connections could cause damage to the unit or the luminaire. As reference: Pins 6 & 7 are typically wired in colors brown and orange.