

Protect Historic Monuments with Room Alert

Montauk Point Lighthouse is a historic landmark located at the eastern tip of Long Island, New York, USA. It holds a significant place in American history, and its construction dates back to the late 18th century. Construction of the Montauk Point Lighthouse began in 1792, and it was completed in 1796, making it one of the oldest lighthouses in the United States. The lighthouse was commissioned by President George Washington and authorized by the Second Congress of the United States. The lighthouse has been added to the National Register of Historic Places, highlighting its importance as a historic structure. It continues to attract visitors interested in its rich history and stunning coastal location.

The Montauk Point Lighthouse is an iconic structure that requires proactive environment monitoring to help preserve its history, safeguard it from environmental threats, and ensure safety for visitors. Prior to installing Room Alert, they lacked the ability to oversee environmental changes inside the lighthouse. Montauk was experiencing moisture damage due to condensation and high humidity. If left unaddressed, this would have lead to mold and mildew growth, corrosion, wood decay, masonry damage, electrical issues, and other costly repairs. Now Montauk Point Lighthouse is protected by Room Alert. Room Alert's humidity monitoring capabilities serve as a key component in protecting the lighthouse.

Room Alert proudly protects historical monuments and construction projects such as the world-famous Montauk Point Lighthouse Museum. Room Alert environment monitoring products are used to protect a wide range of critical assets. By proactively monitoring environmental conditions such as temperature, heat index, power, water/ flood, and more, Room Alert can help ensure workplace safety, customer comfort, data security, productivity, and more.

Room Alert is proud to be an important part of protecting historic landmarks such as this from the 30% of costly unplanned outages that are caused by environment-related threats.

Condensation Threatens the Integrity of Restoration

The Montauk Point Lighthouse tower has undergone extensive restoration over the years. In 2019, the Montauk Historical Society identified that the condition of the masonry in the interior tower was being negatively impacted by water permeating through the masonry and down from the many leaks around the lantern and the masonry structure. Due to the type of coating previously used



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- · Local software provided
- Fully compatible w/ third-party SNMP monitoring tools



on the exterior of the tower, moisture was not able to escape naturally.

Instead, condensation was collecting in the lantern room area and then consequently dripping or raining back down into the structure. After all the time, money, and resources invested, they knew they had to address this environmental concern. Montauk began with metalwork at the top to stop the water from coming in. Next, they removed the old coating and repointed using a lime putty mortar vs. Portland, which was causing the sandstone to deteriorate.

They installed the largest off-the-shelf dehumidifier and ran it for 2 years when conditions permitted. However, they were also using off-the-shelf humidity monitoring that needed to be read manually and was sporadic at best.

Environment Monitoring with Room Alert Helps Prevent High Humidity Leading to Catastrophic Damage

The Montauk Lighthouse quickly identified a need for reliable environment monitoring, specifically with improved humidity detection, which would allow them to keep the interior of the tower fairly dry, preventing condensation due to the drastic temperature changes known to occur throughout different times of the day and night. Room Alert was happy to help.

Room Alert immediately proved itself.

According to Jason Walter, the Site and Maintenance Manager at Montauk Point Lighthouse, "A request from the Coast Guard (CG) was in the works for quite some time that we return a 3.5 order Fresnel to service. This lens was removed from the tower in the mid-80s and placed on display in our Oil Room where it sits today. In February of 2023, we installed Room Alert to start baseline data collection and develop some trends. Room Alert sensors were placed near the area in the lantern room where, hopefully, the 3.5 order will be returned to service. Room Alert immediately proved itself."

Resounding Results

The advanced alerting and graphing capabilities of Room Alert allowed Montauk proactive monitoring and accurate collection of sensor data to provide to the Coast Guard upon request to return the lens to service. Later in May of 2023, they installed a Direct Air Cooling (DAC) unit from Schrofftech in the base of the tower. This allows them to control airflow throughout the tower from the base to 120' at the top of the dome.



IT Equipment Installation - notice Room Alert environment monitoring Digital Temperature & Humidity Sensor

Moving forward, as Montauk continues to pursue returning the lens to active service, they shared, "We can now share environmental data very easily, as well as set up specific custom notifications to immediately address if conditions arise that could jeopardize the integrity of the lens. The integration of Room Alert, paired with the DAC unit, is going to also prove essential to the success of the program in returning our 3.5 order Fresnel lens to service."

We are extremely proud that our award-winning Room Alert platform is able to help ensure the success and longevity of historical monuments and construction projects such as the Montauk Point Lighthouse in Long Island.

Room Alert environment monitoring provides peace of mind by protecting people, property and productivity.

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