Secure Wireless Internet Service for 24/7 Live Monitoring and Remote Access

EdgeRouter™ X provides secure routing with convenient PoE input and passthrough

UniFi® AC Lite AP delivers reliable, high-performance Wi-Fi for technicians

Quick and easy device installation and configuration via intuitive management software

Founded in 1985, Aegis Energy Services manufactures and installs Combined Heat and Power (CHP) systems, also called cogeneration systems. Cogeneration takes a single fuel source, natural gas, to create electricity and heat—this is significantly more efficient than conventional power systems, reducing both energy costs and emissions. CHP systems also enhance the resiliency of onsite electrical systems during power outages.

Headquartered in Holyoke, Massachusetts, Aegis now has nearly a thousand CHP system installations throughout the East Coast, at various types of sites, including multi-unit residences, healthcare facilities, recreational centers, hotel properties, school campuses, military establishments, and pharmaceutical buildings.

Installation site: Lofts at Kendall Square

PRODUCT SELECTION

Aegis sought reliable yet cost-effective devices that would satisfy the needs for both wired and wireless networking. The combination of the EdgeMAX® EdgeRouter X and UniFi AC Lite AP was the winning solution.

<table>
<thead>
<tr>
<th>Model</th>
<th>Number</th>
<th>Purpose</th>
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</thead>
<tbody>
<tr>
<td>ER-X</td>
<td>55+</td>
<td>Gigabit routing with PoE passthrough</td>
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<tr>
<td>UAP-AC-LITE</td>
<td>60+</td>
<td>802.11ac wireless coverage</td>
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<tr>
<td>UC-CK</td>
<td>1</td>
<td>Mini-server running UniFi Controller software</td>
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“We use Ubiquiti’s products to keep our monitoring live 24/7 and provide secure remote access capabilities. It also allows us to remotely manage all devices.”

Joshua Cayo, Technical Service Supervisor, Aegis
Aegis found the Ubiquiti products easy to install and configure. Aegis began deploying the EdgeRouter X devices and UniFi AC Lite APs in New York City and now installs them in various locations across the New England area as well as Washington, DC. The UniFi Cloud Key was installed at the Aegis headquarters in Massachusetts.

“[Ubiquiti products] provide wireless internet service in basements of NYC high-rise buildings for technicians to troubleshoot, diagnose, and repair cogeneration plants.”

Joshua Cayo, Technical Service Supervisor, Aegis

THE CONVENIENCE OF WI-FI

Since most sites are in basements where cellular reception is lacking or unreliable, the wireless coverage provided by the UniFi AC Lite AP is of great benefit to technicians, providing reliable connectivity while allowing them to avoid excessive cellular data usage.

The APs are monitored and managed by the UniFi Controller software, which conducts device discovery, provisioning, and configuration of UniFi devices via a web browser or the UniFi mobile app. Aegis uses a cloud server for remote access of the UniFi Controller software and also keeps a backup on a UniFi Cloud Key.

A SECURE WIRED NETWORK

The EdgeRouter X creates a secure local network for each installation and connects to multiple devices in each CHP system. It features five Gigabit Ethernet ports and options for PoE input on port 1 and PoE passthrough on port 4.

To simplify installation, Aegis uses the PoE adapter of the UniFi AC Lite AP to provide PoE to both the AP and the EdgeRouter, so there is a single power source for both devices.

Aegis uses a cloud instance of the Ubiquiti® Network Management System (UNMS™) to manage the EdgeRouters via an intuitive browser-based UI or the UNMS mobile app. UNMS offers quick device configuration, network monitoring, firmware updates, and configuration backups for various Ubiquiti devices, including airMAX® and UFiber.

“Since my training in UBRSS [Ubiquiti Broadband Routing & Switching Specialist] and UEWA [Ubiquiti Enterprise Wireless Admin] courses, we are using strictly Ubiquiti products... [in] new installations and going back to old locations and replacing the firewalls/switches there.”

Joshua Cayo, Technical Service Supervisor, Aegis

FUTURE PLANS

Aegis continues to champion the adoption of CHP systems throughout the northeast and mid-Atlantic states, where energy costs are high and continue to rise. Aegis also foresees additional growth in the markets of health care, hospitality, and multi-family housing as customers seek to reduce energy costs.