

Intelligence is Your Edge

Powered by Intel

The Intel logo, consisting of the word "intel" in a white, lowercase, sans-serif font on a blue square background.

Ensuring Site Security Across a Vast Network, Regardless of Location or Infrastructure

Written By EPIC IO TEAM

Who is the Customer?

An innovative utility company providing service to approximately 16 million people throughout a 70,000-square-mile service area facing challenges in monitoring remote sites without full infrastructure, seeking advanced security and monitoring solutions.

Challenge

With critical infrastructure spread across 70,000 square miles, the organization faced challenges in securing remote, isolated locations—many lacking traditional infrastructures. They needed a centralized system to provide reliable monitoring, real-time alerts, and ensure compliance across their vast network, regardless of location or infrastructure availability. Key challenges included:

- Dependency on costly onsite resources
High costs of expanding on-site security personnel, with limited ability to monitor multiple locations remotely.
- Risk of Theft and Loss
Remote locations were vulnerable to tampering and theft, including copper wiring, transformers, and critical components, leading to costly repairs and prolonged service disruptions.

- Scalability and Coverage
Seamless coverage across multiple locations, including the most isolated locations and the flexibility to expand quickly across multiple job sites.
- Need for greater visibility
The spoils collection sites need to be monitored for utilization, collection capacity and security of containers housing solid debris and waste water.

Solution of EPIC iO

EPIC iO's combined their in-house centralized monitoring center (SOC) with smart sensors, high-resolution surveillance cameras, and mobile, autonomous connectivity solutions to ensure 24/7 real-time management of multiple physical assets and environments, even in rough terrain remote locations. This solution enabled seamless coverage, even in the most isolated locations, reducing dependency on physical security personnel. Here's what we implemented:

- Mobile Surveillance Units (MSUs) and Fixed Units (FSUs): Adapted for power-limited locations, enabling reliable monitoring.
- Universal IoT Gateway (UIG): Leveraging cutting-edge sensors for real-time alerts or potential threats.
- Peplink-Starlink Integration: Ensured uninterrupted connectivity, allowing continuous monitoring and communication.
- EPIC iO's in-house monitoring Security Operations Center (SOC) provided a centralized facility where critical systems are monitored, assessed, and defended. This provides real-time security analytics and detailed reports, giving businesses insight into their security posture.

By implementing this comprehensive solution, the utility provider could now focus on proactive threat detection and efficient response, resulting in a safer and smarter operation.

Key Features of EPIC iO Solution

- Measurable Time and Cost Savings
By pivoting to AI-powered technologies and remote management, the company reduced their reliance on costly security personnel, while maintaining robust 24/7 security operations.
- Enhanced Visibility
Providing insights into both remote locations and emerging threats, enhances the ability to anticipate and prepare for potential risks.

- Sustainable and Scalable Operations
EPIC iO's solution allows the client to scale without major infrastructure changes, ensuring long-term adaptability.

By implementing AIoT solutions for waste tank level monitoring, the company reduced costs. Instead of driving nearly 2,000 miles over four days to manually check tanks, AI Camera Vision and Sensors now pinpoint which tanks need servicing—eliminating unnecessary trips, saving labor costs, and optimizing operations. The performance of EPIC iO solution reached 39.67% of ROI with \$991k annual savings.

The utility provider reported substantial improvements in security efficiency, site visibility, and resource allocation. Highlights include:

- Savings on Security Staffing: Reallocated resources to core operational areas, saving both time and money.
- Enhanced Operational Awareness: New insights into operational dynamics allowed the team to optimize workflows and enhance productivity.
- Positive Feedback from Operations Team: The intuitive and adaptable features of EPIC iO's solutions received high praise, with the SOC's level of attention to detail noted as a top highlight. ■

Partner Name

EPIC iO

Booth Info

Meeting Room
Casanove 605
Level 1

