

Secure and Resilient 5G and LTE Connectivity for Remote Critical Infrastructure

Businesses that operate critical infrastructure, such as cell towers, power grids, fuel tanks, and access control systems, need secure, reliable, and scalable network connectivity at the edge. These infrastructures are generally located in remote, unmanned, and even in harsh environments, and wireless connectivity, such as private LTE and 5G, delivers the security and bandwidth for cloud-based devices, data, and application management.



Critical Infrastructure Challenges

With many critical infrastructure remote locations, the operations team must provision, monitor, and maintain all IoT devices efficiently and cost-effectively. IoT devices must be flexible to resolve OEM equipment connections, which can vary from OEM to OEM.

Network reliability and costs

Network resilience is foremost when thousands of remote devices are dependent on monitoring and maintaining critical infrastructure operations. Operations teams need to have real-time access and control for business continuity. Operation engineers can analyze collected data to optimize performance and prevent disruptions.

Unforeseen security risks

Remotely located IoT devices require protection from unauthorized access, and all data sent to enterprise applications must be secure.

■ The Lantronix Percepxion[™] Service

The Percepxion Platform, with our LTE or 5G wireless routers, delivers a robust solution for remote critical infrastructure connectivity, real-time device, and data management.

Scalable device lifecycle and application management

The Percepxion platform provides device lifecycle management, application integration, data management, and embedded analytics, allowing businesses to focus on their core operations and optimize performance and efficiency. The Lantronix 5G and LTE wireless routers deliver multiple industry-standard interfaces that connect many OEM devices.

Resilient and high-performance cloud connectivity

Lantronix routers offer flexible WAN connectivity options, providing enterprise-level security, bandwidth, and resilience. In addition, our connectivity services offer SIM cards and cost-effective and unified data plans.

Secured data in flight and at rest

Lantronix devices and software are designed with security at the forefront. All interfaces, data, and storage are protected. Devices and operational data are always encrypted in flight and at rest, providing the required device and data security.

Percepxion Features and Benefits

LTE & 5G Connectivity

For fleet management solutions, choose from several nationwide cellular carriers and leverage the high-speed and low latency of 5G and LTE networks.

Real-time Monitoring

Receive real-time alerts for mission-critical disruptions or unauthorized access, enhancing security at remote, unmanned locations.

Equipment Management

Remotely and efficiently manage thousands of IoT edge devices through a single pane of glass, reducing costly on-site visits and manual oversight.

Security & Access

Protect critical infrastructure devices and data from unauthorized access with robust security features while providing secure operations and remote access for troubleshooting and diagnostics.

Reliability & Business Continuity

Gain insights and implement predictive maintenance actions with telemetry data, ensuring maximum uptime and reducing critical downtime.

On-demand Scalability

With a ready-to-use and fully scalable IoT device management solution, you can scale and grow on demand to accommodate organizational growth or changes in infrastructure requirements.

Lantronix's solution design meets the needs of various critical infrastructure use cases:

Cell Tower OEM Equipment

Provide secure and resilient LTE and 5G connectivity to remotely monitor and control the power supply and fuel level of cell tower power generators, reducing operational costs and environmental impact.

Fuel Tanks

Provide secure and resilient LTE and 5G connectivity to monitor and control the inventory and quality of fuel tanks, both above and underground, remotely. Reduced theft and leakage risks ensure compliance with regulations.

Video Surveillance

Provide secure and resilient LTE and 5G connectivity to monitor and record video feeds from CCTV cameras at critical infrastructure locations remotely, enhancing security and safety.

Access Control

Provide secure and resilient LTE and 5G connectivity to monitor and control access barriers and gates remotely at critical infrastructure locations, enhancing security and convenience.

Lantronix's solution is ideal for businesses that need secure and resilient 5G and LTE connectivity for remote critical infrastructure. It enables enterprises to automate, optimize, and secure operations while reducing costs and complexity.

To learn more about Lantronix's solution, contact a Lantronix expert today.



Learn more at lantronix.com/percepxion

