



MORE THAN A SUPPLIER...  
YOUR PARTNER IN SUCCESS™

# SMART, DYNAMIC WIRELESS NETWORKS ARE THE FOUNDATION OF DIGITAL MINES

---

## **Strata Worldwide helps you create a safer, more efficient and productive mine with LTE**

In today's mining, LTE ultra-broadband networks are becoming a predominant option for communication and Internet-of-Things (IoT) networking. As mining operations become more data-centric and there is a greater use of digital processes, industrial-grade private LTE has proven to provide exceptional coverage, high security, fast speeds and solid reliability for individual mine sites globally.

LTE networks support connectivity for a wide range and large number of devices. This includes mobile and static sensors, phones, laptops, cameras, heavy equipment, autonomous vehicles, connected machines and digitally enhanced personal protection equipment (PPE) in both surface and underground facilities. It is a dedicated universal broadband that makes every kind of communication and information exchange possible.



**MORE THAN A SUPPLIER...  
YOUR PARTNER IN SUCCESS™**

Mines need to work with enormous amounts of data from many different resources located in many different places all at once. LTE wireless architecture is powerful and reliable and can be easily modified to support new sensors and additional applications. With this resource, mines have the ability to make faster decisions, increase safety, accelerate productivity and improve operational efficiency.

### **Safety and Security**

Safety and security are critical concerns of mining companies – concerns which include environmental and equipment-related risks that can jeopardize the health and safety of individuals on-site, as well as cyber threats and attacks to the company digital network. Physical safety is heightened with LTE with on-demand data helping to provide a clear and broad knowledge of operations. IoT sensing provides real-time visibility and digital data awareness, dynamic tracking and machine digitalization monitors the operational health and safety of machinery, and virtual geofencing helps to enforce exclusion zones or restricted, potentially dangerous areas. Modern day digital PPE enable monitoring of worker location, alertness and select health parameters which increase the need for privacy and data security.

To safeguard the security and integrity of the company network, LTE offers a flexible, robust network architecture, together with a multi-tiered security approach. Encryption, carrier-grade authentication and intrusion detection points all help to prevent unauthorized access.

### **Why not Wi-Fi?**

LTE is proving to be more versatile and more reliable than Wi-Fi, even in underground operations. The technology provides far larger network coverage, improved performance for mobile devices, and greater bandwidth capacity. When comparing to today's Wi-Fi, LTE can provide the following benefits:



**MORE THAN A SUPPLIER...  
YOUR PARTNER IN SUCCESS™**

- **Low latency** of 10ms to process a high volume of data with minimal delay
- **Extensive coverage** to connect everyone and everything
- **High capacity** to easily handle rapidly growing numbers of devices, sensors and data
- **Mobility** built on trusted 3GPP mobile standards
- **Greater operational control** and flexibility to enhance safety and respond quickly to changing business needs
- **Mission-critical reliability** for near-continuous operations
- **Predictable performance** for industrial automation and real-time asset coordination
- **Dependable quality of service (QoS)** management
- **Intrinsic resiliency and cyber protection** to ensure truly safe and reliable connection

In 2021, Strata became a channel partner for Nokia to market, distribute and service Nokia's private LTE solutions to the mining markets of North America and Australia.

“Nokia Industrial-grade private wireless delivers robust, reliable and secure low-latency connectivity to support safer, more efficient and more productive mines.” – Nokia

For more information visit Strata Worldwide online at [www.strataworldwide.com/mining](http://www.strataworldwide.com/mining) or call at +1 770 321 2500. Email: [info@strataworldwide.com](mailto:info@strataworldwide.com)