

Providing leading mining solutions



Since 1984, NLT's mission has been to continually develop and deploy the most advanced technologies to make mines safer and more efficient.

Known globally for our award-winning cap lamp technology, we have directed the same passion, commitment and understanding into the design of our underground communication solutions.

In addition to being the first company to introduce Wi-Fi networks to underground coal mines, many of the largest and most reputable mining companies in the world rely on NLT Mining Networks communication solutions.



scalable **durable**



Connecting what matters

Find out why more companies are choosing NLT Mining Networks family of solutions today.

- Best-in-class technologies
- Open standards with built-in redundancy
- Modular design for easy configuration, installation and expansion
- Hardened to withstand the rigours of the mining environment
- Supports all voice, video and data communications
- Unparalleled 24/7 network support

NLT Corporate 33 Laird Drive, Toronto, Ontario, Canada M4G 3S9
Tel. (416) 425 6559 • Fax (416) 425 5960 • E-mail: info@nltinc.com

NLT Chile LTDA Espronceda 539, Ñuñoa -Santiago de Chile
Tel. (56-2) 343 05 06/343 05 09 • Fax (56-2) 274 23 90 • E-mail: info@nltchile.cl

NLT Australia PTY Ltd. Unit 1 & 2, 22-26 Cessna Drive, Caboolture, QLD 4510 M4G 3S9
Tel. 011 +61 7 5495 2944 • Fax 011 +61 7 5495 2966 • E-mail: info@nltinc.com.au

www.nltinc.com

Connecting what matters



NLT Mining Networks comprehensive application solutions

Extracting more value from your mine

Recognizing the key role that superior networking and communication systems play in mine safety and efficiency, Northern Light Technologies (NLT) offers reliable and innovative solutions that immediately generate value for your mines and peace of mind for your miners.

NLT is a turn-key partner in the design, manufacture, deployment, and support of scalable communication technologies that will change the way your mine communicates, collaborates and operates.

NLT Mining Networks Nodes

NetPort*: Standard node configured to run on a CAT5 or fibre backbone; supports WiFi voice, video and data communications. Available in 1-to-3 radio and 1-to-3 port configurations. Also available in Cisco versions.

NetPort IS*: Intrinsically-Safe (IS) node configured to run on a CAT5 or fibre backbone; supports all voice, video and data communications.

Compact Node: A scaled version of the NetPort with the addition of multiple software options, extending wireless coverage to areas not requiring battery backup. Ideally suited for data applications on all types of mining machinery.

NetPortable IS: A wireless, battery-powered, mobile version. Lightweight and quickly deployed. An ideal solution to expand the network at the production face, where fibre isn't practical, or as an emergency bridge in a post-incident situation.

NEW WIOD: Make virtually any piece of equipment in your mine wireless!

* All NetPorts include internal battery backup.



NLT provides one of the most comprehensive offerings of network-based mining communication solutions available today. Our open standards approach allows you to integrate existing and new communication technologies while removing the risk of becoming locked into a single platform. Choose from a wide range of best-in-class applications with the ability to deploy solutions in any order and at a pace that matches your mine objectives.



Miner/Asset Tracking Solutions

NLT offers both Wi-Fi and RFID real-time tracking tailored to meet company and legislative requirements. Reverse RFID tracking provides consistent and precise proximity information. Location information is managed through the NLT Mining Networks software according to zone, time or asset.

- Improve safety by monitoring personnel and equipment location
- Enhance emergency response with real-time tracking
- Increase operational efficiency by reallocating resources
- Use with our new tag-ready, cordless Genesis

Voice Over Wi-Fi with Push to Talk

Mobile voice communications are enabled using telecom industry standards such as SIP and VoIP. Increase safety with immediate notification of conditions and emergencies. Employ your own devices or use our intrinsically safe NLT Ranger™.

- Improve productivity by connecting people and information more efficiently
- Connect to the public phone system with ease
- Reduce capital expenditure by leveraging existing technology

Traffic Management

Real-time vehicle data such as location, payload and vehicle diagnostics can be monitored or integrated with your existing enterprise or mine management systems. Your company can realize tremendous productivity gains using this technology.

- Observe asset availability information
- Monitor payload and engine diagnostic information
- Reduce energy costs through traffic optimization
- Streamline mine traffic to increase tons per day

Two Way Text Messaging

Utilizing the NLT Messenger™ cap lamp with integrated two-way messaging, workers can receive and respond to text messages through any 802.11 compliant network. The NLT Mining Networks software manages the messages, which can be sent, sorted and searched with ease.

- Real-time, two-way communication underground
- Mine-wide emergency message alerts
- Operator-initiated emergency calling
- Improved emergency response time
- Reduced downtime through job tracking progress

Environmental Monitoring

NLT Mining Networks measures environmental parameters such as gas concentrations, temperature, humidity and airflow. Levels are monitored according to zones and triggers alarms when specified thresholds are exceeded.

- Enables early warning of hazardous conditions
- Reduces need for manual surveys
- Improves flow balancing with bidirectional airflow management
- Interfaces to existing PLCs and data network
- Integrates with standard fixed gas sensors and other environmental devices
- Reduces false alarms with unique threshold feature

Operational Video Conferencing

The Onsite 2500R rugged camera helps field workers share, diagnose, consult and resolve issues in real time with remote experts using the Onsite Connect collaboration software.

- Real time, high quality video stream for collaboration
- 2-way VOIP audio with both speakerphone and headset
- Video/audio calls to SIP video conferencing endpoints
- Outstanding optical: 10x zoom and 1 cm (1/2 inch) macro
- Built-in illumination ring for low light conditions



reliable flexible

