

Northern Light Digital™

Connectivity *That Shines*

Northern Light Digital™ Tracking

is a real-time location solution designed for mining. Northern Light Digital™ Tracking offers RFID-based tracking and WiFi tracking to provide optimal coverage to protect all your assets.

Improve safety by monitoring the location of personnel or equipment in real-time

Increase productivity through the logistical deployment of resources

Benefit from increased operational efficiency



Northern Light Digital™ RFID Tracking

Northern Light Digital™ RFID Tracking integrates RFID technology into an underground digital communication network to provide real-time, accurate tracking of personnel and equipment to improve safety and productivity.

RFID tag location is detected by RFID tag readers. Tag readers integrate into Northern Light Digital™ nodes and manage tracking information through the Northern Light Digital™ Mine Software in real-time.

RFID Tracking allows for a high level of precision; coverage area can be easily customized to meet requirements.

Features

- Integrate RFID tags into Northern Light® cap lamps to eliminate the need for tag battery replacement while reducing the number of devices workers have to carry
- Define zones according to requirements; track assets within large or small areas
- Search for specific assets, according to name, qualifications or last-known location

Northern Light Digital™ RFID Tag

Operating Temperature:	-10° - +60° C
Storage Temperature:	-20° - +70° C
Humidity:	5% - 90% non-condensing
Size:	64 x 30 x 9 mm
Weight:	15 grams
Enclosure:	ABS (ultrasonically-sealed) IP 65
Tx Frequency:	433 Mhz
Field Strength:	<1600 µV/m
Modulation:	ASK
Stability:	SAW Stabalized
Battery:	Lithium or powered by cap lamp

Northern Light Digital™ RFID Tag Reader

Rx Frequency:	433 Mhz
Size:	84 x 40 x 19 mm
Weight:	45 grams
Enclosure:	ABS (ultrasonically-sealed)
Input/Output:	2 x RJ45 Sockets

Northern Light Digital™ WiFi Tracking

Northern Light Digital™ WiFi Tracking uses wireless networking technology and the industry's leading WiFi-based active RFID tags to provide accurate tracking of personnel and equipment to improve safety and productivity.

WiFi tag location is detected by a IEEE 802.11 compliant access points as part of a digital communications network. No additional components or infrastructure are required. Location information is managed through the Northern Light Digital™ Tracking Software.

Features

- Integrate WiFi tags into the cap lamp or use as stand-alone
- Optimize battery life by programming tag transmission rates
- Perform telemetry by configuring tags to retrieve and send data, such as mileage, fuel and temperature wirelessly

WiFi Tag Technical Specification

Weight:	35 grams or 1.2 oz
Dimensions:	62 x 40 x 17mm or 2.44 x 1.57 x .67"
Enclosure:	IP-67
Mounting Options:	Embedded in cap lamp, wrist strap or vehicle mount
Operating Temp.	-30° to +75°C or -22° to +167°F
Humidity:	0-100% condensing
Battery Type:	3.6V Lithium or powered by cap lamp
Lifespan:	Up to 4 years
Certification:	FCC Part 15, subpart C, B EN 300-328, EN 300-330, EN 301-489, RSS 210, ARIB STD-T66, ARIB STD-33, MIC, CE, CTUV