



# Smart Cap Lamps



Smart Cap Lamps are IoT-enabled cap lamps which, in partnership with 3rd-party solution providers, incorporate proximity and/or tracking tags and may also enable evacuation/proximity warnings, lone worker alerts and two-way communication.

## Which NLT cap lamps are “Smart”?



### Genesis

The world’s first cordless cap lamp to have a built-in tracking tag. Can accommodate an RFID/Wi-Fi tracking or proximity detection tag. Introduced in 2012, almost 10,000 Genesis lamps have been sold.



### Eagle

The first and only tag-agnostic, semi-corded lamp to accommodate a tracking and/or proximity tag. The Eagle is currently the smartest cap lamp in the world.



### Falcon

The first corded lamp to accommodate a tracking and/or proximity tag. Can include a flashing taillight.

## Key Benefits for Mines:

- Tag is always on the miner (missing tags can be dangerous; replacing tags is expensive)
- One charger/one rechargeable battery (a significant cost reduction over disposable batteries)
- Mine knows where their personnel are at all times
- More & better data for mines to support safety and productivity
- Personnel pinpointed & evacuation expedited in the instance of a mine event
- Reduction in miners’ injury & death from equipment impact through proximity awareness
- Ensures miners are where they are supposed to be, doing what they are supposed to be doing through tracking
- Mine can better allocate resources, such as an electrician, to fix a situation

*“A tracking solution is like lifting the lid off a mine and allowing management to see what is going on in real time.”*

## Partners

Today, we work with most of the major tracking and proximity providers around the world:



NLT’s engineers are experts in the integration process, and we are keen to collaborate with other 3rd-party solution providers.

**Field-replaceable parts for great ROI – Every part of every lamp, including the battery, is replaceable – a huge benefit over disposable cap lamps!**



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## Genesis

NLT's line of Smart lamps debuted with Genesis, the world's first cordless cap lamp to accommodate a tracking tag. For use in the harshest environments, the intrinsically safe (IS), all-in-one Genesis cap lamp has the capacity



to accommodate a variety of tracking tag options while keeping the battery and light source in a single high-impact, IP67-rated enclosure. Its innovative engineering makes it programmable, with custom functionality to support 3rd-party solutions, as well as customizable for bidirectional communication. Genesis is certified IS to ATEX, IECEx and MSHA with the Extronics/Aero-Scout Wi-Fi tracking tag. The Genesis is an ideal choice for mines looking for a cordless lamp today with plans to introduce tracking in the future.

Since the launch of the Genesis cap lamp, NLT has worked with numerous market leaders in RFID/Wi-Fi tracking to fit their tags into our all-in-one design.

## Eagle

The first cap lamp to accommodate both tracking and proximity tags, the safety-and-productivity-focused Eagle is the most technically advanced Smart Lamp on the market today. The Eagle provides programmable functionality with two additional buttons to support bidirectional communication and multiple safety features. The Eagle is semi-corded with the battery pack worn on the back of the hardhat for excellent weight distribution. Additionally, there is a rear-facing "taillight" that alerts others of the miner's presence ahead.



Recognized by 3rd-party solution suppliers as the best multi-tag lamp option available, the Eagle features large tag pockets in both the headpiece and battery pack, making it highly adaptable and customizable. NLT currently has partnerships with many of the top tracking and proximity solution providers and has worked closely with them to integrate their solutions into our Smart Cap Lamps. NLT has designed the Eagle to take advantage of today's technology while providing the flexibility to accommodate emerging safety and communications technologies.

## Falcon

After the successful launch of the Eagle cap lamp, we developed the Falcon cap lamp as the corded cap lamp to accommodate both tracking and proximity tags. The Falcon provides all the advantages of Eagle including being



proximity-ready, tracking-enabled and incorporating multiple safety features while having the battery pack worn at the hip. The Falcon continues to provide programmable functionality with two additional buttons to support bidirectional communication and multiple safety features. The Falcon also features the taillight built into the lamp cord to allow others to see the miner ahead.

Like the Eagle, the Falcon was engineered to be "future-proof," that is, to incorporate today's technology while having the flexibility to accommodate tomorrow's emerging technologies.