



How does the Department of Defense Community benefit from using OpticalLock products?

What kind of high value goods does it protect and why?

OpticalLock protects any cargo that is being shipped or stored by sensing motion, location, security status, humidity, and temperature. Many assets are sensitive to extreme conditions and OpticalLock can provide real-time status:

- CONUS and OCONUS Shipping: Cargo Tracking and Security
- Trucking, Shipping and Airfreight
- High-Value Goods Shipping, Storage, Monitoring and Security
- Remote facilities
- Counterfeit exchange
- Weapons and ammunition
- Medical supplies
- Classified & sensitive documents
- Government/DOD equipment security

Geofencing

Typical geofencing is a location-based service in which an app or other software uses GPS, RFID, Wi-Fi or cellular data to trigger a pre-programmed action when a mobile device or RFID tag enters or exits a virtual boundary set up around a geographical location.

OpticalLock's Patented Geofencing GSM lock tracking system has Cellular, GPS, RFID, Bluetooth and WIFI tracked on our proprietary tracking web portal. Cybersecurity is embedded which is an added layer of security which complements the AES256 encryption and offers our customers peace of mind. Next generation will also have 4G capability which complements the patented design within the NIST framework.

- Secure, tamper-evident, counterfeit proof
- Cost effective security for high value goods & data
- 24/7 tracking + complete usage history / lock
- Access audit trail collected and stored
- Flexibility in applications with padlock form factor
- Rechargeable, long-life battery (application dependent – up to 6 months before recharging)
- Certified safe for use in munitions environments
- Operating range: -25 C to + 60 C (see details on product data sheet)
- Easy access & use of cloud-based management software

- User-friendly interface

[How is Geofencing a promising technique for emerging location-based services and protection?](#)
By creating a cybersecure barrier, OpticalLock's geofencing technology allows customers to track point to point or multiple point shipping pervasively for all types of assets ranging from individual consumers to large scale, enterprise clients.

[What is the importance of geofencing in the cargo industry?](#)

Geofencing is essential for the security of assets in motion and at rest and provides peace of mind for our clients in an era of counterfeiting, theft, and the high cost of insuring goods on an international scale. The era of Internet of Things technology enables drastically improved capability to ensure cargo finds its intended destination safely. Useful in loading docks where goods are guarded when going through customs. [HOTLINK TO GEOFENCING PAGE](#)

[Real time tamper detection, alerting and tracking](#)

Using fiber optics to create unique DNA and monitoring via web-based portal or phone app, OpticalLock leverages the Internet of Things platforms. It provides a culmination of data with customizable intervals of checking status to allow clients to know where their assets are located. If the lock is ever severed, constant tracking is enabled for recovery. Tracking does not rely only on one technology but is adaptive to leverage WIFI, cellular, GPS or RFID. OpticalLock is adaptive and reusable for many different use cases for all types of assets.

[Can OpticalLock prevent cargo theft?](#)

Not necessarily, however, OpticalLock is a cutting edge, proactive monitoring of the security status of cargo using geofencing which provides an early alert if tampering is attempted and high-tech tracking enabling recovery.

[Form Factor](#)

Palm size, sleek design and provides easy handling of its cutting-edge technology from a computer or phone app.

[How OpticalLock's monitoring system is different from a traditional locking and tracking system](#)

OpticalLock has over 10 unique patents issued and pending that surpass traditional locking or tracking system via features like humidity and temperature alerts as well as web-based, real-time tracking. Our product breaks traditional analog, physical locks or separate GPS trackers offering an all-in-one, feature rich device.

[How can OpticalLock prevent counterfeit goods substitution?](#)

Each IoT unit has a unique Pedigree (or identification) created during the manufacturing process. The Pedigree signature is stored in our Secure Cloud Servers. Upon receipt of a shipment, the user can authenticate the pedigree and obtain a report to certify a container was never opened by an unauthorized person which prevents counterfeit goods substitution. Ensuring original goods are not tampered with, our clients can rest assured that their branded products are not substituted with counterfeits.

What inspired us to create a system like this and why

OpticalLock's founders recognized a huge technology gap in cargo shipping security status, tracking and monitoring precious assets. Billions of dollars' worth of assets are lost globally and is only getting worse. Recognizing the need to leverage high technology to solve this business crisis was the catalyst to create our products. OpticalLock has partnered with Raytheon in a customized product that adapts to the Raytheon developed, ATLAS global logistics management information system. Customization services are available for many diverse uses including Satellite capabilities.

What makes our system unique?

Military grade, AES256 cybersecure encryption, cascaded Cybersecure communications, real-time GPS, RFID and WIFI reporting and alerts coupled with the unique DNA of fiber optics which prevents counterfeiting the IoT, make OpticalLock a leader in technology. Defense contractors' interest in OpticalLock proves its unique, high-value technology for mission-critical needs.

How it works

Clients purchase a set of OpticalLocks and implements them as high-tech locking, securing and tracking system by placing them on their cargo containers, boats, trucks, train cars or vehicles establishing a four digital, secure PIN that can be shared with carriers, customs agents or end-point recipients. Once the asset arrives safely at its destination, the lock can be leveraged for its next use. OpticalLock is a sleek, easy to use device.

Confidence is drastically improved in ways that surprises our clients and changes the entire dynamic of shipping, with knowledge and data at their fingertips. OpticalLock eliminates the archaic ways of intermittent bar code scanning, manual inventory taking or unexpected loss with no opportunity for retrieval.