LIGHTLOC®

The Leader in Underground Pathway Protection

Vehicle Detection Cable

Vehicle Detection Cable Overview

Vehicle Detection Cable is a product in the LightLOC family designed to detect and locate attempts of unauthorized vehicle entry into secure areas. Constructed with four aluminum alloy wires and three stainless steel tubes containing optical nerve fibers, it is a unique metallic cable in that detection sensing is incorporated into the package with fiber. The cable is installed at tension on robust supports typically 24"-36" above the ground. Thus, accessing a secure area surrounded by detection cable with a vehicle requires cutting or driving through or over it the cable compromising the nerve fibers and triggering an alarm at the monitoring station.

As with all of the LightLOC products, Vehicle Detection Cable is designed for a zero false alarm rate. With a breaking strength over 3000 pounds and a 3/8" diameter, it is robust enough to not cause alarms from handling or vibration. A significant force is required to damage the cable, and only severe damage results in an alarm.

The fiber in Detection Cable is monitored from up to 25km away with either a LightLOC Network or Express Monitoring System. When monitored by a Network System, alarm locations may be pinpointed, typically within 5 meters.

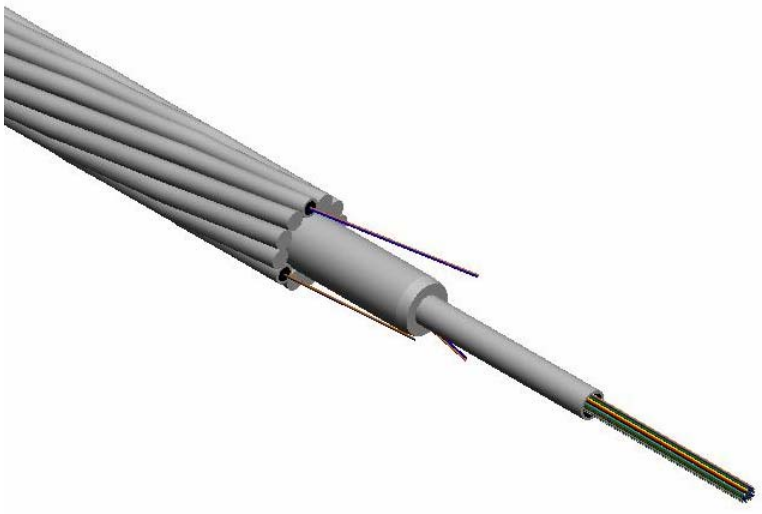
The system example on the following page represents a typical application for Vehicle Detection Cable: a critical asset surrounded by double fencing and an outer perimeter fence much further out. Detection Cable may be deployed at the outer perimeter to detect unauthorized vehicle entry and provide the maximum standoff distance and, therefore, response time.

Standard Features

- Metallic Vehicle Detection Cable with Optical Nerve Fibers for Continuous Surveillance
- Low False Alarm Rates
- Long-Range Monitoring to 25km Standard
- Power Not Required on Perimeter
- Comprised of Four Aluminum Alloy Wires and Three Stainless Steel Tubes Containing Fiber
- 3/8" diameter, 3253 Pound Rated Breaking Strength
- 40 Year Life
- -60C to 85C Operating Temperature Range
- Optimized for Use With LightLOC Network and Express Monitoring Systems
- 1550nm Operation with Standard Single Mode Fiber
- Robust Support Hardware:
  - 8"x8" Steel Beam Corner Posts in Concrete
  - Line Posts In-Between to Hold Cable Tension and Position Correctly
- Tamper Resistant Mounting Hardware
- Monitored Splice Enclosures Where Needed
- Designed with Monitored Gates at Access Points

Vehicle Detection Cable:

Your Smart Perimeter Cable Solution



For additional information on the LightLOC® system, please contact Doug Piper at 864.963-5131 or dpiper@lightloc.com

Typical System Example

Technical Details

Monitoring Systems	LightLOC Network System LightLOC Express Processor LightLOC Multi-Port Express
Power Requirements	None in Field Monitoring System Powered As Specified
Cable Tube Material	Laser-Welded Stainless Steel
Cable Wire Material	Aluminum Alloy 6201
Cable Life	40 Years
Fiber Type	Single-mode
Monitored Wavelength	1550nm
Operating Temperature	-60C to 85C
Cable Diameter	9.7mm, 0.382in
Approximate Cable Weight	154 kg/km, 548 lbs/mile
Calculated Breaking Load	1476kg, 3253lbs
Minimum Bend Radius	Static: 6in, Dynamic: 8in
Maximum Perimeter Length	25km, 12.4mi

Ordering Information

Perimeter cable systems are custom designed for customer applications. Please contact us for a quote.

LightLOC Overview

LightLOC is a patented, fiber-optic based security system providing the optimum in perimeter and access security. The system provides monitoring of remote access points and perimeters using a family of sensors and cables developed and made by LightLOC. Monitored items can include manholes, gates, doors, culverts, perimeter vehicle detection and vehicle denial cable systems, and custom applications. Monitoring is possible at distances of up to 25km without the need for electrical power at the monitored locations. The robustness of the system eliminates false alarms commonly seen with other fiber-based security systems, and LightLOC systems are inherently tamper resistant since altering or destroying optical components triggers alarms automatically.

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