LIMINAL-F

FIBER OPTIC INSTRUSION DETECTION
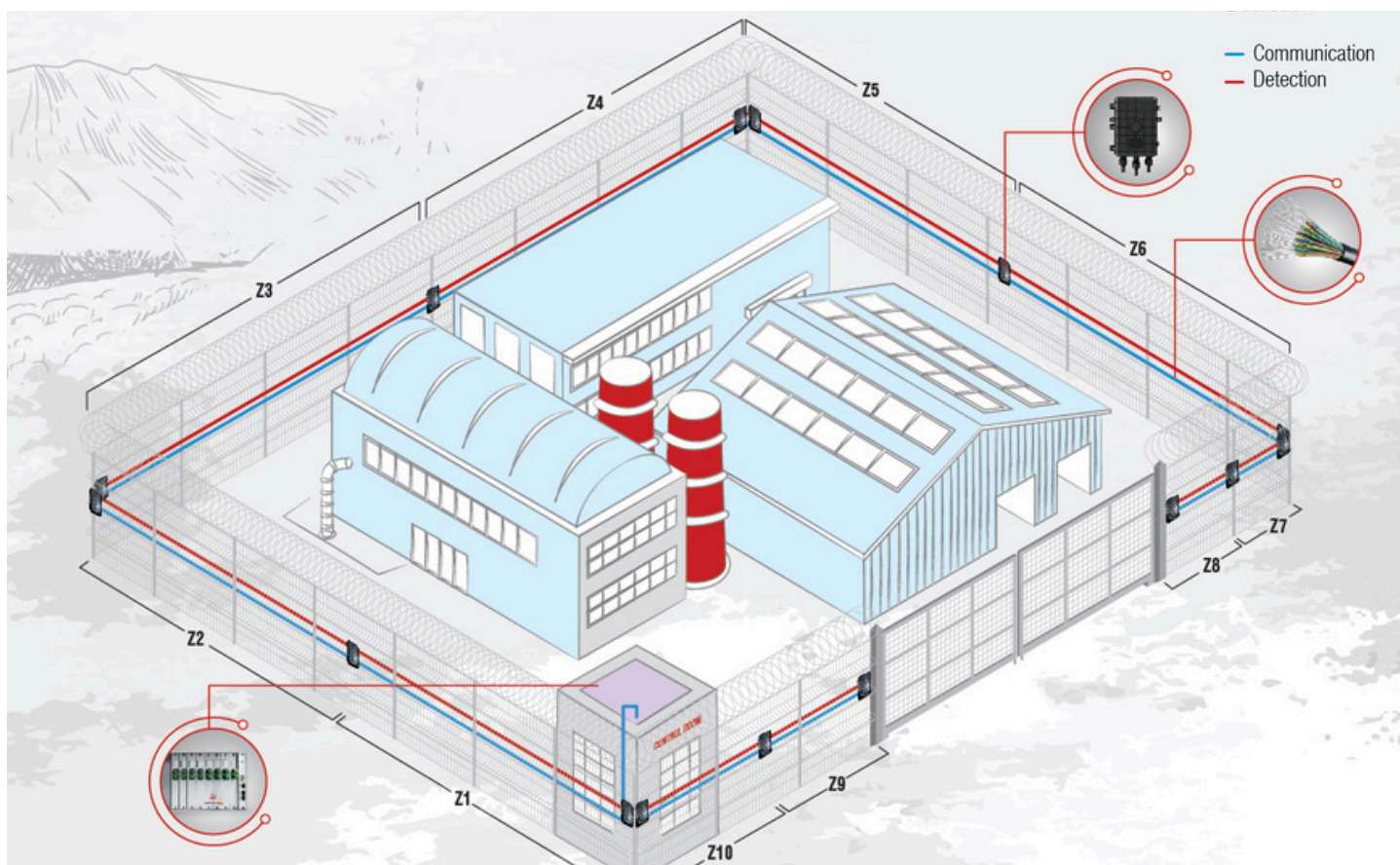
DESCRIPTION

Liminal-F is a rack-mountable, multi-zone optical fiber-based intrusion detection system designed for large perimeters. It can monitor up to 16 distinct zones, providing precise and reliable detection of physical disturbances through advanced optical fiber technology. The system integrates seamlessly with network-based security systems via its TCP/IP interface, enabling real-time alerts and remote monitoring for enhanced perimeter security.

- **TCP/IP Interface**
- **Weather Proof**
- **Immune to Electromagnetic Interference**
- **Easy sensitivity adjustment**

Liminal-F is an advanced fiber-optic intrusion detection system designed for robust perimeter security. It operates on the principle of light signal interference within optical fibers, which can be installed over walls, fences, or underground.

This versatile system is functionally robust, maintaining performance under sunlight, high temperatures, rain, moisture, and dust. Being electrically passive, Liminal-F carries no electrical current, making it immune to electromagnetic and radio frequency interference.

Its primary application is in areas requiring critical security monitoring, providing reliable and precise intrusion detection.

Legend: — Communication — Detection

Zones: Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9, Z10

PARAMETER	SPECIFICATIONS	
Number of zone per device	Upto 16 zones	
Typical zone length	800 '	
Type of deployment	Overground	Underground
Deployment scenarios	Fence, Walls	Under soil/concrete
Depth	Depends on height of fence / wall	1.5 feet below soil
Events detected	• Climbing fence • Cutting fence • Cutting Fiber • Drilling wall • Tampering fence/wall	• Digging • Running • Normal walking • Excavations • Drilling ground
Deployment patterns	Parallel lines Wave	Parallel line Wave / Dolphin Tail

SENSOR FEATURES

IMMUNE TO LIGHTNING

It offers exceptional protection with high insulation metal components , making it resistant to lightning.

WEATHER PROOF

The fiber optic cables of LIMINAL-F are weather-resistant by design , making them the best choice.

VERSATILE

Works on wall , all kind of fences and also underground

SENSITIVITY ADJUSTMENT

The system continues to operate normally even after detecting a failure in a few components.

IMMUNE TO EMI

The system is insulated with fiber optics which has the ability to provide immunity towards EMI OR RFI.

DEPLOYMENT PATTERNS

Different deployment patterns available such as Loop , Dolphin Tail , Single Line / Double Line , Straight Line