**Description**

MagBar is an intrusion detection solution that combines a massive physical grid with an embedded intrusion detection sensor. Each MagBar installation is tailored to the specific dimensions of the pipe, drain, open tunnel, canal, air duct or window that it is meant to protect.

Two versions of MagBar are available; both electro-mechanical and electro-optical sensors have been optimized to detect cutting, bending and removing of the physical grid.

The grid is extremely robust and sustains heavy water flow. It remains operational even when completely submerged under water for many years.

Several techniques are available to ensure consistent water flow and to overcome silt build-up which could block the grid:

- A “guillotine” like grid with a sliding rail which can be manually lifted through winches when cleaning is required
- A “guillotine” like grid, supported by an electric motor, which automatically lifts the gate if the water level exceeds a certain height
- Door-like gates to enable silt cleaning with breakable pins (optional), designed to shear and open under excessive water pressure

MagBar can operate independently as a stand-alone system or be integrated into a wider PIDS (Perimeter Intrusion Detection System) solution. MagBar can report alarms via RS-422 communication or dry contact relay outputs.

**Markets**

MagBar is a maintenance-free answer to the problem of security vulnerabilities posed by storm drains, tunnels and other fixed openings. CIP installations, military sites and correctional facilities around the work utilize MagBar to plug critical holes in their perimeter security systems.

**How it works**

Intrusion attempts on the grid structure disturb the light in the fiber-optics or break the embedded electrical wire to generate an alarm.
MagBar comes in two versions:

- **CAST-MagBar** uses an embedded electro-mechanical sensor which detects cutting and bending of the steel grid. It requires no power and provides a standard dry contact output.

- **OPTI-GRID-MagBar** uses an electro-optical sensor which detects cutting and minor bending of the steel grid. It is connected to a communication processor and communicates through a standard dry contact output or through a long range RS-422 serial output.

**Specifications are subject to change without prior notice.**