



Electro – Guard 3750

NON-LETHAL ELECTRIFIED FENCE SYSTEM

Introduction

DeTekion Security Systems, Inc. is the manufacturer and distributor of the latest generation of Non-Lethal Electrified Fence Systems (NLEFS), the Electro-Guard 3750. The Electro-Guard 3750 removes electronics from the field and places them in a single Electrifier Cabinet. This eliminates the need for costly conduit and cabling in the field required by other systems. The Electro-Guard 3750 NLEFS Electrifier utilizes three energizers to electrify conductor wires in different phases. An alarm condition is signaled when an electrified wire is climbed, cut, shorted to ground, or when any adjacent electrified wires touch each other. The Electro-Guard 3750 System employs the latest technology for locating an alarm. The Balanced Current System (BCS) acts like a Wheatstone Bridge circuit which indicates the location of an alarm. This allows for an efficient response to the alarm.

Operation

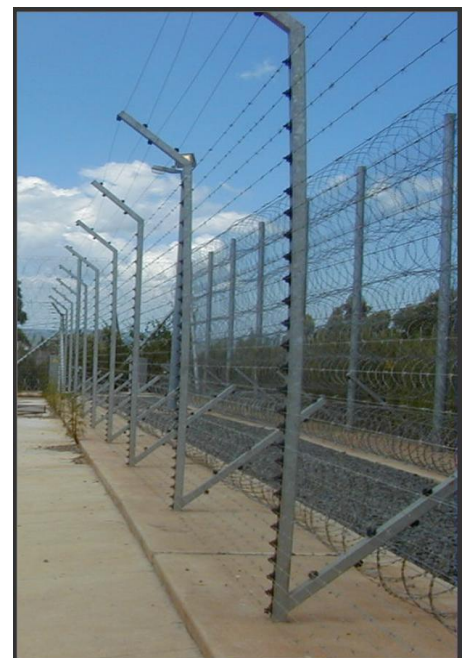
The Electro-Guard 3750 NLEFS can operate in different modes allowing maximum flexibility including low voltage monitoring, non lethal pulse monitoring and automatic mode that instantly changes from low voltage monitoring to non lethal pulse monitoring upon detection of an intrusion or escape attempt.

Configuration Flexibility

The Electro-Guard 3750 NLEFS can be installed in a customized configuration at any site. The height and configuration are designed on a case by case basis. Any combination of vertical and outrigger sections are possible. Electrified wire spacing and zone lengths are also site specific. The Electro-Guard 3750 NLEFS can also accommodate vertical zones within horizontal zones allowing for exceptional alarm resolution.

Features

- Formidable Physical and Psychological Barrier
- No Electronics in the field
- Environmentally friendly
- Full time low voltage monitor mode or full time Non-Lethal monitoring modes available
- Latest generation Non-Lethal Electrifier Technology
- Dual loop energizers provide redundancy
- Reliable detection capability
- Superior delay effect
- Optional anti climb outriggers
- Weather resistant and robust construction
- Highly defeat resistant
- The Electro-Guard 3750 is equipped with three energizers and up to 54 miles of wire may be electrified utilizing one 3750 Electrifier Cabinet.
- Highly resistant to lightning strikes
- Every wire is powered.



Electrifiers

The Electrifier Cabinet contains 3 energizers. The Non Lethal energizers supply voltage to the wire loops. These loops are energized out of phase. The Non-Lethal energizers are compliant to the International Electrotechnical Committee Specification TEC 336-2-76 and 335-2-76. In the Non-Lethal mode the energizer's output is a pulsating DC voltage adjustable up to 10k V between fence loops / adjacent wires, -5kV on one loop / wire, +5kV on the other.

Controllers

The Electro-Guard 3750 Control Unit constantly monitors every wire along the entire loop length for an alarm condition (Ground Faults, Shorts, Opens). The Control Unit employs the latest technology for locating an alarm. The Balanced Current System (BCS) provides the Central Control Station the capability to identify the location of an alarm condition. The 3750 Control Unit communicates via RS-232, RS-485 or by Fiber Optic Cables and is able to integrate with virtually any type of external Monitor/Control Unit including the OMNI Controller. The 3750 Control Unit is housed in the same cabinet as the three energizers and all settings, parameters and other programming of the NLEFS can be done at this location or at the external Monitor/Control Unit. Real time actual operating conditions are provided at the 3750 Control Unit and the external Monitor/Control Unit. Seamless integration with CCTV, outdoor impact lighting and mobile alarm map systems is available.

Lightning Protection

The Electro-Guard 3750 NLEFS can operate in very harsh environmental conditions. The Electro-Guard 3750 uses the latest technology available for lightning protection. Four Silicon MOV's rated at 5.1 KV with a maximum residual voltage of more than 48kV are installed in the Electrifier cabinet. The MOV's protect the energizers from transient surges in the High Voltage Cables.

Insulators

Nylon Post Mount Insulators are used which will break if more than 35kg of force is placed on the insulator. The Post Mount Insulator protects against possible Sparking over. The Pull Insulators are of the same material as the Post Mount Insulators. All the Insulators are UV resistant.

Wires

A durable stainless steel wire rope is used, which is 1.8 mm thick, and woven around the support posts to inhibit the spreading of electrified wires. IEC forbids electrification of any type of barbed wire; therefore smooth wire is used.



DeTekion Security Systems, Inc.

200 Plaza Drive
Vestal, New York 13850
Phone 607-729-7179
Fax 607-729-5149
www.detekion.com



Specifications

Application	Non lethal electrified fence system to deter, detect and delay an intruder / escapee. It can be remotely controlled or "stand alone"
Zone Length	Dependent upon site requirements and site Conditions. Vertical zones are possible
Fence Height	Per site requirements
Fence Length / 3750 Electrifier	Up to 54 miles of wire may be electrified utilizing one 3750 Electrifier.
Dimensions - Electrifier	1,524mm (H) x 610mm (W) x 660mm (D)
Operating Temperature	-40° C to +70° C
Electro Magnetic Compatibility	Class IV Insulation Electrifiers 75kV BIL
Power Requirements	240VAC Single Phase
Electrifier Outputs	Switchable to any modes either manually or automatically per programmed control
Output Voltage	Up to +5kV pulsing on Loop A Up to -5kV pulsing on Loop B
Monitor Voltage	50V Pulse
Lighting Protection	5.1kV MOV Arrester Voltage Complying to IEC 99-4
Alarm Detection	Short between wire loops Ground of any wire loop Cut of any wire loop
Alarm Indication	Full Graphic User Interface (GUI) and Control on external Controller
LED Indication on Energizer	
Maintenance	Routine inspection
Installation	By DeTekion trained installers
Location (Energizer)	Internally or externally mounted
Warranty	12 months from date of approved installation