



## GENERIC SPECIFICATION

### SYSTEM DESCRIPTION

The system shall operate by means of a sensor cable, which is attached at a high level and a low level to form a loop on the perimeter fence. In the event of an intruder attempting to force entry, the vibration caused by the intrusion will be detected by the sensor cable and passed to the CLS analyser. The CLS analyser converts the vibrations into alarm and audio verification signals, which are sent back to the central control.



### SENSOR CABLE

- The sensor cable shall have a solid state 2 conductor coaxial construction.
- The sensor cable shall be able to detect movement with equal sensitivity along its entire length.
- The sensor cable shall have an outside diameter of 2.8mm, a half life sensitivity of 40 years and a maximum zone length of 300m.
- The operating temperature shall be  $-40$  degrees centigrade to  $+85$  degrees centigrade.
- Repair of the sensor cable shall be achieved quickly by the use of a screened jointing box.

### CLOSED LOOP SIGNAL ANALYSER

- The CLS analyser shall process the signals received from the sensor cable in terms of frequency, amplitude and time.
- The CLS analyser shall have separate and independent processing and set up for climb detection and cut detection.
- The CLS analyser shall have an Automatic Environmental Control, which is used to minimise nuisance alarms caused by wind, rain or other climatic conditions.
- The CLS analyser shall monitor the integrity of the sensor cable. If the sensor cable is cut or short circuited a tamper alarm shall be generated. If the cable is cut the detection capabilities shall not be lost. The sensor cable shall still be able to detect and generate alarms either side of the cut.
- The CLS analyser shall have the following internal control to facilitate adjusting the CLS analyser settings. All controls shall be digital switches.

# Flexiguard Closed Loop System

<b>CLIMB CONTROLS</b>	A.E.C.	ON/OFF
	GAIN 1, GAIN 2	ON/OFF
	IMPULSE COUNTER	1-9
	TIME WINDOW	2,3 or 4 Seconds
	SENSITIVITY	0-15
<b>CUT CONTROLS</b>	IMPULSE COUNTER	1-9 Counts
	TIME WINDOW	5-75 Seconds
	SENSITIVITY	0-15

The CLS analyser shall have the following internal indicators to facilitate setting up and testing.

<b>CLIMB INDICATORS</b>	ALARM ACTIVATED
	TIME WINDOW
	CABLE OPEN CIRCUIT
	IMPULSE DETECTED
	A.E.C. OPERATING

<b>CUT INDICATORS</b>	TIME WINDOW
	IMPULSE

The CLS analyser shall be capable of operating from a supply of 15 to 21 VDC with a power consumption of 18 MA. Alarm and tamper outputs shall be in the form of normally closed dry contacts.

An audio output shall be available for alarm verification. The output level shall be IV peak to peak into an impedance of 600 ohms.

All electronics should be protected against the environment by means of a conformed coating and being housed in a metal enclosure of IP66 rating.

## SENSOR CABLE INSTALLATION

The sensor cable shall be attached to the fence to form a loop using ultra violet resistant cable ties. For extra protection the sensor cable can be housed in a 6mm-diameter stainless steel roundlock flexible conduit.