

CU-07

Perimeter intrusion detection system for small sites

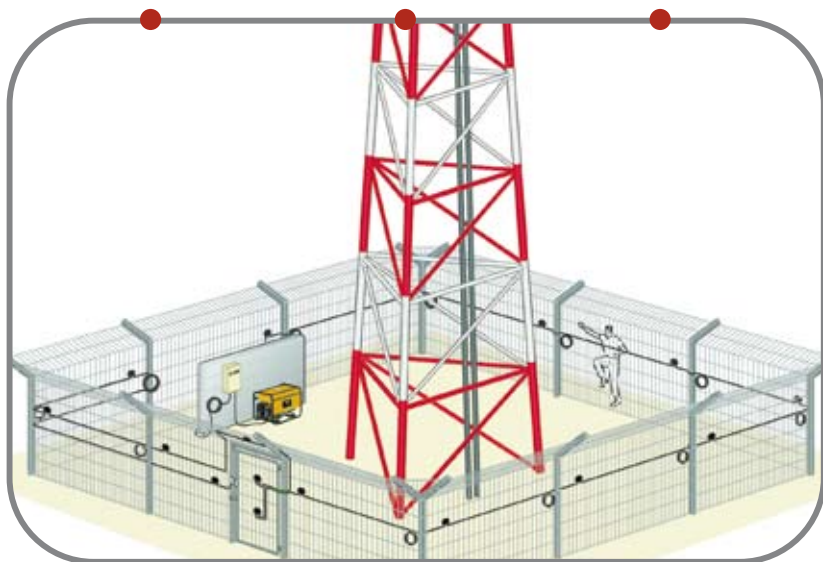
The CU-07 is a stand-alone, small scale, perimeter intrusion detection system for protection of small sites with a perimeter of up to 800 meters per Single Controller. Based on EL-Far's Patented Vibration Perimeter Fence Sensor technology, the CU-07 solution incorporates a Single Chip Microprocessor that allows it to detect and verify real intrusion events along perimeters up to 800 meters, with a resolution of ± 10 meters and extremely low False Alarm Rate (F.A.R.).

Features

- Protects perimeters up to 800 meters.
- Can be installed on any type of existing fence.
- Battery back-up.
- Allows manual or automatic sensitivity adjustment according to the protecting perimeter characteristics and weather conditions.
- Allows neutralizing sections without affecting the detection capability of the entire perimeter.
- Lightning protected.
- All weather operation.
- UV protected sensor line.

Applications

Critical infrastructure – Water reservoirs, Power stations, Oil farms, Remote Communication sites Storage sites, VIP houses and more.



System Functions

The CU-07 can be programmed to alert security personnel of a verified intrusion event by any of the following means:

- Activation of a buzzer/audio alarm.
- Displays the distance of the event from the Central Control Unit.
- Dry contact relay that can activate: Dialer, Radio Transmitter, Siren etc.
- Indicate the location of event on an Area Map. (Optional)
- Activate dry contact relay for every 50 meter zone. (Optional)
- Send a message through RS-232 protocol. (Optional)

EL-FAR Electronics systems 2000 Ltd.



The perimeter intrusion detection principle of the CU-07 is based on "Reflected Wave Technology".

The Control Unit - CU-07 transmits electric pulses into the sensor line. When there is an intrusion attempt along the perimeter, it will be detected by a reflected wave. The time delay between the transmitted and there reflected wave will determine the location of the event within ± 10 meters resolution.

This "RADAR-LIKE" principle of the system simplifies the structure of the system on one hand, and on the other hand provides advantages which, other technologies are unable to meet.

The sensor line, which is composed of only one twisted-pair cable, simplifies the installation and maintenance and is protected by an end-of-line resistor against any tampering with the system.

The CU-07 is a stand alone system and does not require a central computer to operate. All the control and monitoring is performed via the Control Unit with a simple user interface.

Technical Data

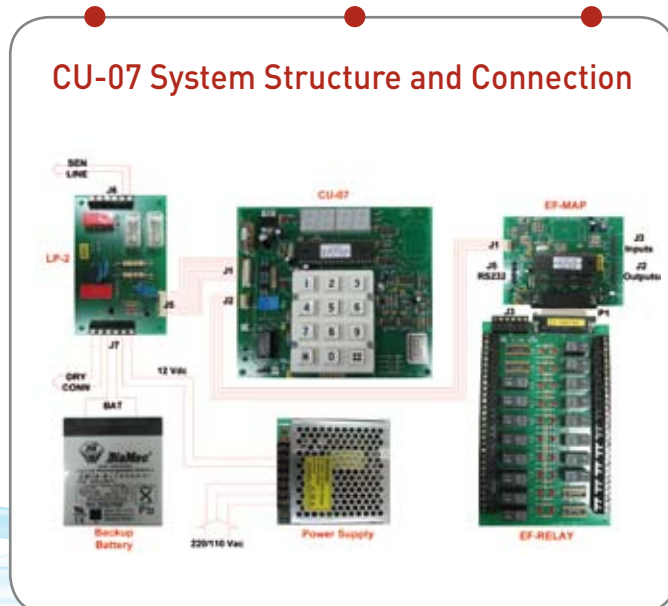
Sensor Line - Ef-SL

Operating temperature	-45°C to +85°
Relative humidity	100%
Operating voltage	5 – 35 V
Operating current	5-50 mA
Enclosure	In high impact plastic, UV protected
External enclosure	High impact plastic UV protected

Control Unit - Cu

Battery	12 Volt Lead Acid
Maximum detection distance	800 meter
Resolution of detection	± 10 meter
Power supply	90 to 230 Vac
Operating voltage	11 to 15 Vdc
Principle of operation	Reflected Waves in Transmission Line
Current consumption	0.25 m Amps.
Output pulse amplitude	5 Volts
Operational temperature	-45°C to 70°C
Lightning Protection	6500 Amp. high speed response time - 35 n. Sec.

CU-07 System Structure and Connection



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