

E-Field

Electrostatic Field Disturbance Sensor Series 800/5000

High risk applications

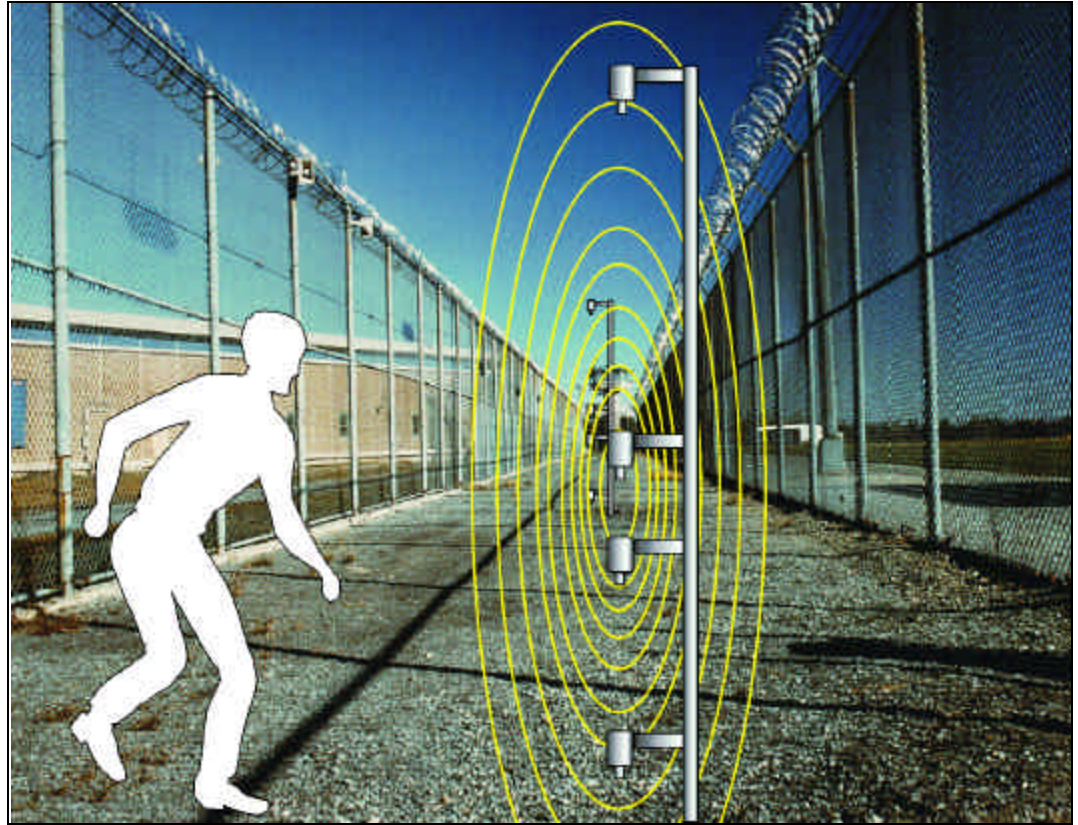
Enhanced signal processing

Well defined coverage, adjustable detection pattern

Follows terrain and perimeter contour

High immunity to animals and environmental changes

New non-conductive mounting hardware



E-Field® is a terrain-following, volumetric sensor. It follows the contours of the land when mounted on a fence, or on free-standing posts adjacent to or between physical barriers. In controlled applications, E-Field can be mounted on walls, roofs and other structures in zones that can be configured in any length up to 150 m (500 ft).

An E-Field system contains a field generator which excites long field wires. Sense wires, installed parallel to the field wires, are connected to the E-Field signal processor where received signals are monitored and analyzed. When an intruder enters the E-Field detection pattern, the level and character of the received signals are momentarily altered. If these changes occur within specified limits, an intrusion alarm is activated.

The E-Field balanced-phase design provides high immunity to electrical and environmental factors. Operating on the principle of common mode rejection, the E-Field signal processor compares the change in coupling between each set of field/sense wires. When the changes are similar,

they are canceled. However, when an intruder attempts to penetrate an E-Field, the system is unbalanced and an alarm is generated.

The Series 800 processors detect a compound signal consisting of amplitude change (mass of the intruder), rate of change (movement of the intruder), and preset time disturbance (time intruder is in the detection pattern). Detection is not hampered by rain, fog or even snow. With its user selectable bandpass, the Series 800 enables detection of very slow human movement.

E-Field will detect a mass of 35 kg (77 lbs.) moving at a speed between 5 cm (2 in.) per second to 8 m (26 ft.) per second, with a probability of detection greater than 95 percent.

Because E-Field generates a volumetric field of detection along the length of the zone, it is designed to be used in a controlled perimeter, clear of vegetation, which includes a barrier through which animals and humans cannot inadvertently stray.

Senstar  Stellar