

# Condor

## Dual Technology IR & Microwave Solution

**The Condor** solution from EL-Far combines IR and Microwave technology in a single solution and provides an invisible protection wall along an open area, building wall or fence. Implementing the Condor solution with EL-Far's central command and control system significantly elevates the site's protection level by creating a complex barrier in which both technologies operate concurrently. The system, using a proprietary algorithm, ensures a very high detection rate with very low false alarm rates.

### System Components

The Condor is made up of a pair (TX and RX) of columns in which Infrared Beam and Microwave technology are combined in a single unit. The columns can either be blended into the environment providing covert protection or can be visible and serve as a deterrent. Both sensing elements are located in a single casing and are connected electronically using a unique algorithm which enables it to make an alarm decision.

The solution can be used in conjunction with other smart sensors to provide multi-layered protection and deliver data fusion providing the ultimate security solution.

### IR Efficiency

An IR barrier consists of a constant IR signal being transmitted from an emitter to a receiver over a specific area. When an obstacle comes between the emitter and the receiver, the IR signal is blocked and the receiver flags the event in an appropriate manner.

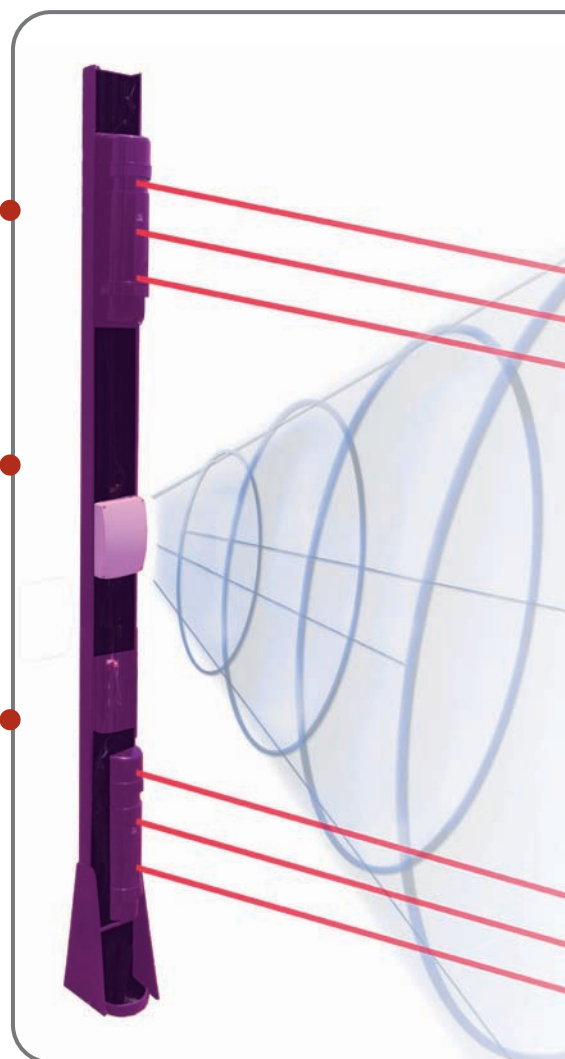
### Microwave

The Microwave is the technology that functions as the "activator" due to the fact that in most cases, it is activated first. Its detection capacity is determined by a lobe that can be regulated with its own trimmer, reaching up to 8mt in diameter.

### Key Advantages

There are important key advantages that come from using combined intrusion detection systems:

- Each type of sensor responds to different agents, accounting for a wider range of environmental nuisances.
- As the system enables the implementation of two technologies simultaneously, it raises the bar to filter out weaker alarm signals.
- Tailored selectivity – alert decision algorithm includes IR only, Microwave only or combination of both technologies
- High detection resolution
- Simple and easy to install and maintain



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## Features & Benefits

- Dual technology
- Selectable IR detection sensitivity
- Selectable Microwave detection sensitivity
- Selectable detection technology combination
- Highest probability of detection
- Unique algorithms ensure lowest false alarm rate
- Weatherproof casing
- Auto temperature compensation
- Dry contact output interface.
- Multiple applications
- Multiple ranges
- High Detection resolutions

## Specifications

Microwave Sensitivity	Adjustable.
Sunlight	Light Filter Built-in
Alarm Contact	N.C. and N.O. relay, 0.25A/50V DC
Tamper Switch	N.C., 0.1A/28V DC
Warm-up Time	1 minute
Detection Speed	0.1-5 m/seconds
Coverage Distance	0 m x 150 m
Sensor Enclosure	IP65
Power Supply	10-15V DC
Current Consumption per sensor	24mA @12V
Operating Temperature	-20°C to 70°C
Humidity	100%

## Dual Technology Solution from El-Far



Exploded view



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