

# TAKEX

The Choice of Professionals Worldwide.

## Combination Sensor: COM-IN-50HF



This combination sensor consists of the TAKEX Intelligent Quad Series Photoelectric Beam coupled with the K band microwave sensor to ensure maximum stability in severe weather conditions.

### Two Frequencies (H) and (L) Selection

Two models are available with different microwave frequencies, COM-IN-50HF/H (24.19GHz) and COM-IN-50HF/L (24.11GHz).

### Intelligent Beam Functions

- **Four-frequency selection**  
Four separate beam frequency choices avoid cross-talk in stacked or long linear installations.
- **Environmental output selector**  
The environmental signal is initiated when the beam reception level is reduced below an acceptable level by poor weather conditions (dense fog or torrential rain etc.)
- **Alarm memory**  
Alarm memory LED indicates which sensor issues an alarm when two or more sensors are placed on a zone.

### Features of Microwave Sensor

- Monitor jack output.
- Easy beam alignment.

### Features of Photoelectric Beam Sensor

- High immunity against hazardous weather such as heavy fog, snowfall or dew.
- 4 synchronized high power infrared beams.
- **Sensitivity attenuation LED**  
Lights when beam level is attenuated, which shows low sensitivity.
- Monitor jack output.
- **Protection against frost/dew**  
A frost proof double cover allows continual use in colder climate conditions (optional heater PBH available for extreme environments).

### Other Features

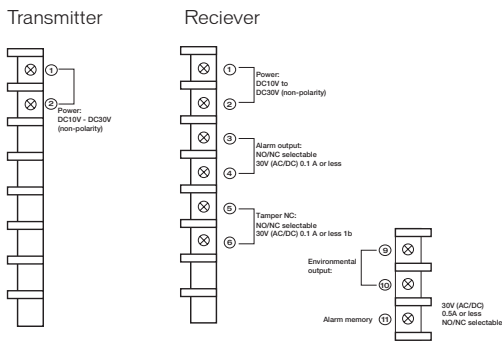
- Automatic gain control (AGC) circuit.
- Pre-wired AND/OR gated alarm output mode.
- Microwave antennae and PE beam lenses adjustable (horizontally  $\pm 90^\circ$ , vertically  $\pm 10^\circ$ ).
- Tamper output.
- Pole or wall mount.
- Optional accessories.

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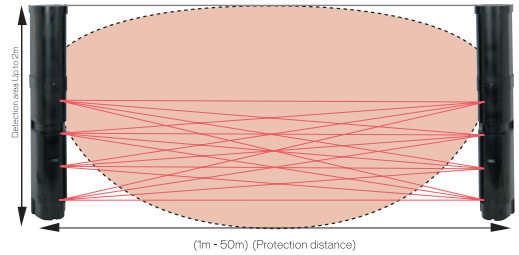
## Specifications

Type	Combination sensor	
Model	COM-IN-50HF	
Protection distance	1m to 50m	
Max. arrival distance	Photoelectric beam: 500m (tenfold margin distance) Microwave: 100m	
Infrared beam	LED (pulsed beam by LED) Double modulation	
Microwave	(L) 24.1GHz (H) 24.19GHz	
Detection system	Photoelectric beam and Microwave	
Response time	Photoelectric beam sensor: 50msec. to 700msec. (Variable at pot) Microwave: 40msec. to 300msec. (Variable at pot)	
Alarm signal	Dry contact relay output 1C Contact action: Interruption time + delay time (approx. 2sec.) Contact capacity: 30V (AC/DC) 1A	
Environmental signal	Dry contact relay output NO or NC Contact capacity: 30V (AC/DC) 0.5A	
Supply voltage	12 to 30V DC	
Power consumption	When alarmed: 165mA or less Transmitter: 65mA or less Receiver: 100mA or less	When adjusted: 200mA or less Transmitter: 65mA or less Receiver: 135mA or less
Tamper signal	Dry contact output 1b (N/C) Contact capacity: 30V (AC/DC) 0.1A	
Function	Alignment tone switch, attenuation LED, Monitor Jack, Alarm memory indication, Modulation frequency selectable (4 stage), Environmental check, Automatic gain control (AGC) circuit, Front protection cover, Alarm output selectable (AND/OR)	
Weight	Transmitter: 1850g	Receiver: 2000g
Appearance	Wine Red PC Resin	

## Terminal



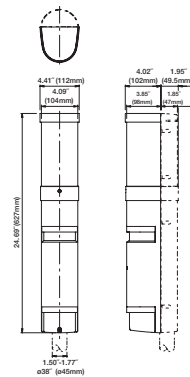
## Protection Distance



## Optional



## External Dimensions: Unit inch (mm)



**TAKEX Europe Ltd.**  
Aviary Court, Wade Road  
Basingstoke, Hampshire  
RG24 8PE, UK  
Tel. +44 (0)1256 475555  
Fax. +44 (0)1256 466268