

12m x 180° DUAL-ZONE OUTDOOR PIR



# MX-12FAMD

PIR + Microwave with Anti-Masking

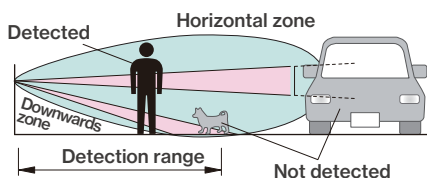
- SLIM DESIGN
- DUAL TECH
- 180° DETECTION



## Dual-zone detection system with Microwave reduces false alarms significantly for reliable outdoor protection

### TRIPLE DETECTION SYSTEM (2× PIR ZONE + MICROWAVE)

Horizontal/downward zones and MW require simultaneous detection preventing nuisance alarms caused by small animals and passing vehicles.



### 180 DEGREE WIDE ANGLE COVERAGE

Up to 180° of complete coverage, with independent 2m - 12m adjustable protection distance for left and right sides for maximum installation versatility.

### DUAL ALARM SIGNAL OUTPUTS

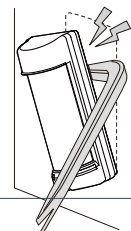
- Choose between:
- individual alarm outputs per 90 degree left and right side
  - Or a combined 180 degree output + external output for triggering CCTV or ancillary devices.

### ANTI-MASKING

Protected by sophisticated Anti-Masking technology with near-lens awareness, designed to initiate an alarm if the device is compromised.

### BACK TAMPER

Equipped with both front and back tamper to detect interference or attempted theft of the sensor any time of the day or night.



### IMPROVED AREA MASKS

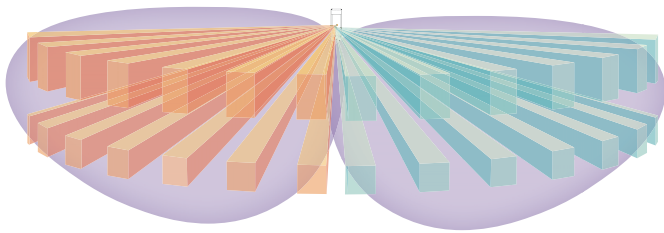
Durable area masks stored within the device allow the coverage pattern to be customised to specific site requirements.

### STABILITY IN VARIOUS ENVIRONMENTS

By combining multiple settings of the microwave sensor, pulse count and sensitivity adjustment, stable detection performance is achieved against various environments.

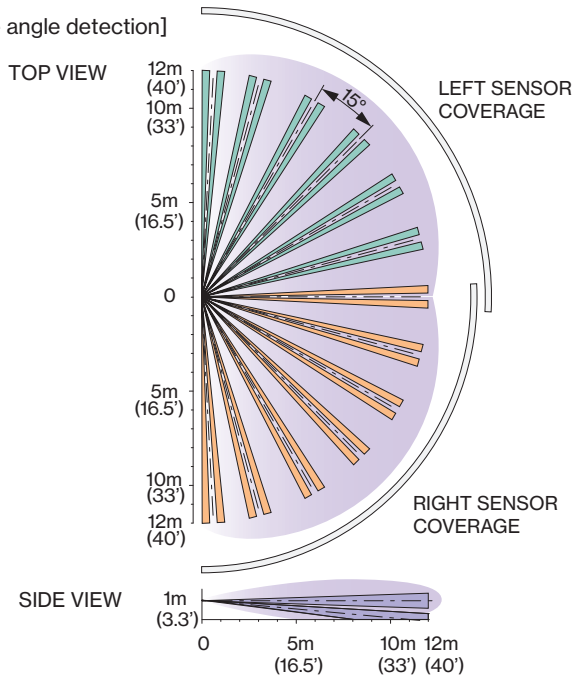
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## COVERAGE PATTERN

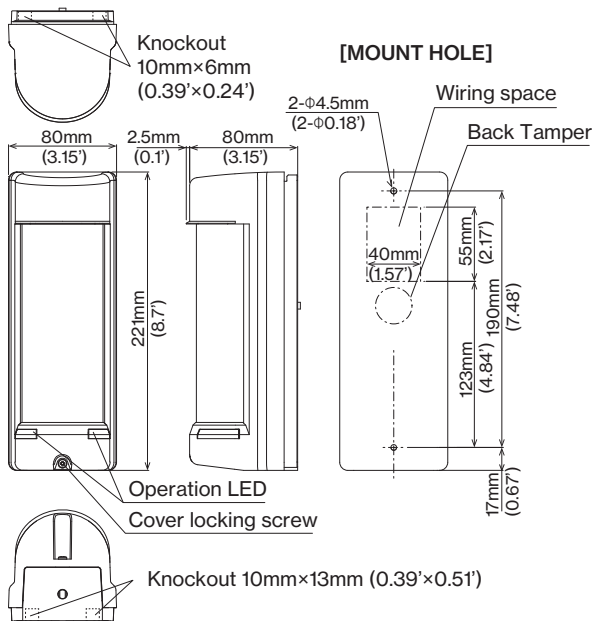


## DETECTION AREA

[Wide angle detection]



## EXTERNAL DIMENSIONS

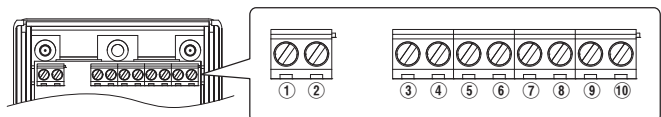


## SPECIFICATIONS

Model	MX-12FAMD	
Detection system	Passive infrared and Microwave	
Microwave transmit frequency and power	24.150 to 24.250GHz 12.7dBm e.i.r.p.	
Detection area	Horizontal detection Angle : 180°, Detection distance : 12m(40') Horizontal zone : 14 zones Downward zone : 14 zones	
PIR Area adjustment	Detection distance : 2 to 12m(10' to 40') [10 ranges] (by adjusting vertical angle of downward curtain) left and right adjustment individually possible	
Supply voltage	9 to 28V DC (non-polarity)	
Current consumption	40mA max.	
Alarm output (1)	ALARM RIGHT+LEFT	Dry contact relay output N.C./N.O. selectable • Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) • Contact operation : Detection time (+2sec.)
	ALARM RIGHT	
Alarm output (2)	ALARM LEFT	Dry contact relay output N.C./N.O. selectable • Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) • Contact operation : Detection time (+2sec.)
	EXTERNAL OUTPUT	
Trouble output	Dry contact relay output N.C. Contact capacity : 30V (AC/DC) 0.2A max. (Resistive load) (Masking detection / Low supply voltage / Self diagnosis error)	
Tamper output	Dry contact relay output N.C. Contact capacity : 30V (AC/DC) 0.1A max. (Resistive load) (Cover tamper / Back tamper (when enabled))	
Operation LED	Red LED • Warm-up (Blinking) • Alarm detection (Lights approx.2sec only for Walk test) • Low supply voltage (Blinking slowly) • Masking detection (Blinking rapidly) • Self diagnosis error (Lights continuously) • Microwave alarm detection (Lights max.2sec only for Walk test)	
Pulse count	1 / 3 times (selectable with DIP switch)	
PIR sensitivity adjustment	60/80/100/120% (selectable with DIP switch, left and right sensors individually)	
Microwave range adjustment	Short / Long (selectable with DIP switch, left and right sensors individually)	
Functions	Anti-masking, Microwave environment, Back tamper, Trouble alarm Low voltage monitoring, Anti-masking Environmental level	
Connection	Terminals	
Ambient temperature	-25°C to + 60°C (-13°F to + 140°F)	
Mounting position	Indoor / Outdoor	
Ingress protection	IP55 (Wall mount)	
Weight	400g (14.2oz)	
Appearance	Body : resin (white) / Lens : resin (white)	
Optional	Pole attachment : BP-32	

\* Specifications and design are subject to change without prior notice.

## TERMINAL CONFIGURATION



①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
POWER		ALARM(1)		ALARM(2)		TROUBLE		TAMPER	
ALARM RIGHT + LEFT		EXTERNAL OUTPUT		ALARM RIGHT		ALARM LEFT			
		Mode setting "A-2" ON				Mode setting "A-2" OFF			

POWER : 9 to 28V DC (non-polarity) Current consumption 30mA max.  
ALARM OUTPUT (1) : N.C./N.O. selectable, 30V (AC/DC) 0.2A max. (Resistive load)  
ALARM OUTPUT (2) : N.C./N.O. selectable, 30V (AC/DC) 0.2A max. (Resistive load)  
(For EXTERNAL OUTPUT : N.O. only)  
TROUBLE OUTPUT : N.C. 30V (AC/DC) 0.2A max. (Resistive load)  
TAMPER OUTPUT : N.C. 30V (AC/DC) 0.1A max. (Resistive load)

## OPTIONAL

● Pole attachment <BP-32>



### Please note:

This sensor is designed to detect intrusion and flame to initiate an alarm; it is not a burglary or a crime preventing device. TAKEX is not responsible for damage, injury or losses caused by accident, theft, Acts of God (including inductive surge by lightning), abuse, misuse, abnormal usage, faulty installation or improper maintenance.