FLAME PASSIVE SENSOR

FP-2500E





FLAME DETECTION AT 33ft.(10m) AND INTRUSION DETECTION WIDE ANGLE 33ft.(10m), WITH COMPACT DESIGN!
IDEAL COMBINATION SENSOR TO MINIMIZE NUISANCE ALARM AND REALIZE SAFER INDOOR PROTECTION OF YOUR PREMISE.

TWO OUTPUT MODES SELECTABLE

Two output modes are selectable; "AND" detection mode, and "Individual" detection mode.

- "AND" detection mode initiates flame and passive alarm signal output at the same time when both flame and passive infrared sensor detect during the selected time.
- "Individual" detection mode initiates flame or passive alarm signal output when either the flame sensor or passive sensor detects.

FORCED OUTPUT OPERATION

The flame sensor initiates flame alarm signal after continued detection for a certain period of time, even in "AND" detection mode, without any detection of passive sensor detection.

ALARM MEMORY

It can be easily identified by Alarm memory indication (flame and passive sensor individually) which sensor is activated. Memory LED blinks for 3 min. and lights on for 47 min. after alarm activation.

PET IMMUNITY (Passive Sensor)

Multiple Zone Technology ensures 40 lbs. (20kg) pet immunity with outstandingly high performance and reliability.

AREA ADJUSTMENT (Passive Sensor)

The coverage pattern can be adjusted to different mounting heights by moving the inner unit.

OPERATION SET-UP BY DETECTION TIMER (Flame Sensor)

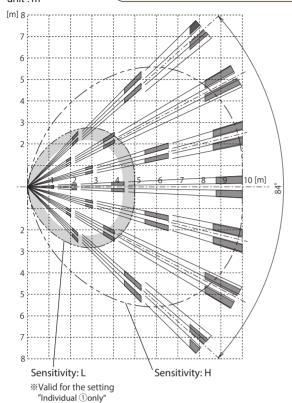
The alarm will be activated only when the sensor detects a flame (ultraviolet rays) for longer time than set time. Two detection times are selectable by DIP switch on the sensor. < 1 sec., 3 sec. >

FLAME PASSIVE SENSOR

Detection area

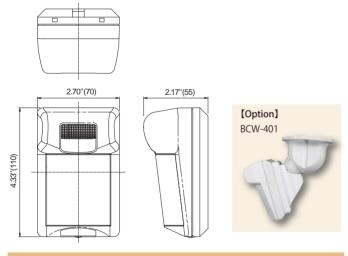
■Wide Angle unit:m

Setting conditions
Detection timer: 1sec.
Origin of flame: Gas lighter
Size of flame: Approx. 2.75"(7cm)



External dimensions

Unit:inch (mm)



External dimensions

POWER 10 to 30VDC 20mA non-polarity N.C./N.O. 30VAC/DC) 0.25A N.C./N.O. N.C.

Allowable wiring distance between sensor and power source

Size of wire	Distance at 12VDC
AWG 22 (Dia. 0.65mm)	830 ft. (250m)
AWG 20 (Dia. 0.80mm)	1470 ft. (450m)
AWG 18 (Dia. 1.00mm)	2300 ft. (700m)

•The maximum wire length, when two or more units are connected, is the above distance divided by the number of units.

Specifications

Detection system Detection area angle Alarm LED (RED) Detection area Detection area Detection area Detection area Alarm LED (RED) Detection area Detection area Detection area Detection area Detection system Detection sensitivity (H [100%], L[50%]) *Detection sensitivity (H [100%], L[50%]) *Detection sensitivity can be set at only "Individual" mode. *H[100%] is fixed at "AND" mode. Part of flame sensor • Lighting at alarm (detection time + off delay. Approx. 2 sec.) • Blinking (3 min) and Lighting (47 min) at memory Detection area Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O.N.C. selectable) • Contact operation : Detection time + off delay. (Approx. 2 sec.) • Contact capacity : 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	Product name FLAME PASSIVE SENSOR		
Detection system Detection distance Detection area angle Detection setting Detection sensitivity (H [100%], L[50%]) *Detection sensitivity (H [100%], L[50%]) *Detection sensitivity (an be set at only "Individual" mode. *H[100%] is fixed at "AND" mode. Part of flame sensor • Lighting at alarm (detection time + off delay. Approx. 2 sec.) • Blinking (3 min) and Lighting (47 min) at memory Detection area angle adjustment Passive infrared Detection area angle adjustment Part of passive sensor • Lighting at alarm (one shot, Approx. 2 sec.) • Blinking (3 min) and Lighting (47 min) at memory • Lighting at trouble. Power supply 10V to 30VDC (non-polarity) Current consumption Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O.N.C. selectable) • Contact operation : Detection time + off delay. (Approx. 2 sec.) • Contact capacity : 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)			
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Power supply 10V to 30VDC (non-polarity) Current consumption 20mA Max. Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: Detection time + off delay. (Approx. 2 selectable) • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	Detect	Detection system	Passive infrared
Power supply 10V to 30VDC (non-polarity) Current consumption 20mA Max. Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: Detection time + off delay. (Approx. 2 selectable) • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	assiv	Detection area	Wide Angle 33'(10m) Max. 29 pairs
Power supply 10V to 30VDC (non-polarity) Current consumption 20mA Max. Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: Detection time + off delay. (Approx. 2 selectable) • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	e sens		3 steps
Current consumption 20mA Max. Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectabl • Contact operation: Detection time + off delay. (Approx. 2 s • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	or part	Alarm LED (RED)	Lighting at alarm (one shot, Approx. 2 sec.) Blinking (3 min) and Lighting (47 min) at memory
Individual mode Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectabl • Contact operation: Detection time + off delay. (Approx. 2 sr • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)		Power supply	10V to 30VDC (non-polarity)
Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectabl • Contact operation: Detection time + off delay. (Approx. 2 s • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load Passive sensor output (From alarm terminal ②)	Cu	rrent consumption	20mA Max.
Contact operation: One shot (Approx. 2 sec.) Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load AND mode Alarm signal outputs from alarm terminal ①、② when both sensors detect during the selected tin Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) Contact operation: Min 2 sec (Max. depends on AND mode timer setting)	Alarm output		Flame sensor output (From alarm terminal ①) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: Detection time + off delay. (Approx. 2 sec.) • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load) Passive sensor output (From alarm terminal ②) • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: One shot (Approx. 2 sec.) • Contact capacity: 30V (AC/DC) 0.25A Max. (resistive load) AND mode Alarm signal outputs from alarm terminal ①、②、 when both sensors detect during the selected time. • Dry contact relay (Semi-Conductor) (N.O./N.C. selectable) • Contact operation: Min 2 sec
Tamper output Dry contact relay N.C. (Activated when the front cover is detached) Contact capacity: 30V (AC/DC) 0.1A Max. (resistive load)		Tamper output	
Alarm memory Reset after blinking (3 min) and lighting (47 min) (Operate flame and passive LED individually)		Alarm memory	
Ambient temperature range 5°F to +131°F (-15°C to +55°C) without condensati	Am	bient temperature range	5°F to +131°F (-15°C to +55°C) without condensation
Mounting position Indoor wall surface (Ceiling with option attachment "BCW-4"	١	Mounting position	Indoor wall surface (Ceiling with option attachment "BCW-401")
Connections Self-up terminal		Connections	Self-up terminal
Weight Approx. 120g	Weight		Approx. 120g
Appearance Resin		Appearance	Resin

Maintenance

- Check the operation once a week.
- Do not fail to check operation whenever a funiture in the place is moved in and out of detection area.

When housing is stained, remove the stain with a soft cloth using water or mild detergent.

Do not use such chemicals as thinner or benzine to clean the heusing.

TAKENAKA ENGINEERING CO., LTD.

Please note

These flote.

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.

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