PIR-TF-550-DT DUAL OCCUPANCY SENSOR

combines infrared and microwave sensors

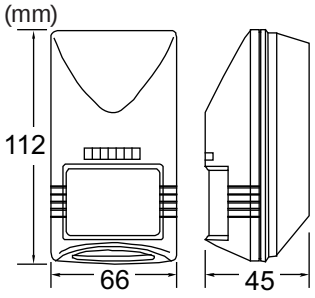
- **Combines PIR and MW sensors in one**
- **Adjustable microwave detection sensitivity**
- **Superior occupancy detection capability**
- **Programmable ON and OFF delay settings**
- **Enabled audible Delay End Warning (DEW)**
- **SmartDelay automatic setting technology**
- **Walk-through mode for passage occupancy**
- **Programmable LUX level threshold settings**
- **ECG output for 0 ~ 10V dimmer control**
- **Manual override signal input terminal**

TECHNICAL DATA

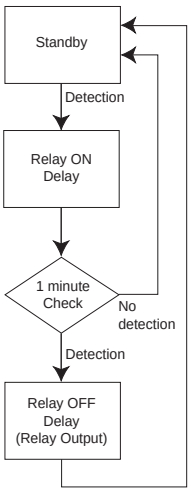
Power supply:	18-26V AC/DC
Current drain:	20mA @ 24V DC
Alarm output:	1 changing contact, 24V AC/DC, 5A/NO, 3A/NC
Lux level setting:	1~2000 lux, 4-section settings
Manual override:	Monmentary contact
Auto-off time:	5 times of OFF delay time
Walk-thru mode:	3 min. if no activity within 30 sec.
RFI immunity:	Av. 25 V/m (10-1000MHz)
Operation temperature:	-10°C to +60°C
Mountage height:	1,8-3,6m
Colour:	White
Humidity:	95% rH max.
Bracket:	MB-99
Protection:	IP20

DIMENSIONS

(mm)



OPERATION DIAGRAM



GENERAL

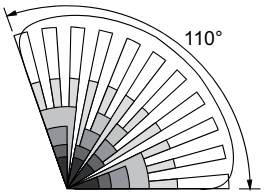
The PIR-TF-550-DT is an advanced dual technology occupancy sensor that combines passive infrared (PIR) and microwave (MW) sensing technologies into one housing. By integrating two different sensing technologies with intelligent firmware control, the PIR-TF-550-DT features second-to-none occupancy sensing performance.

This sensor will provide a voltage free, changeover relay output for HVAC or lighting controls when it verifies human presence within its detection area. An ECG output can be linked with 0 ~ 10 V dimmer control unit.

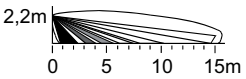
Its unique ON and OFF delays offers versatile and custom controls. SmartDelay setting technology enables sensor installation with minimal adjustment. The audible Delay-End Warning (DEW) can be enabled to alert the occupant the approaching of delay expiration. For today's state-of-the-art building management, our PIR-TF-550-DT dual technology occupancy sensor offers all the edges you need for lighting and HVAC controls.

DETECTION PATTERN

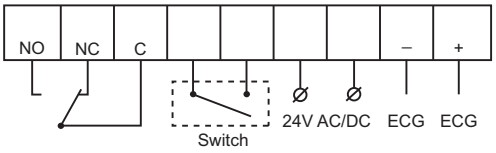
110°, 15 x 15 m at 25°C Top View



Side View



WIRING DIAGRAM



ON AND OFF DELAYS

Switch	0	1	2	3	4	5	6	7
ON	0 sec	5 sec	10 sec	20 sec	30 sec	1 min	3 min	5 min
OFF	10 sec	1 min	3 min	5 min	10 min	20 min	30 min	60 min

Note! Before changing the delay settings, switch always off the supply voltage.

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CE

OCCUPANCY DETECTION

Occupancy status is firstly verified when PIR sensor detects the presence of occupant, and then adding the microwave sensor plus the OR logic control microcontroller to enhance occupancy verification.

DETECTION COVERAGE

Assuming there are no physical obstructions within the detection range, the pattern of detection will be a 110° arc centered directly below the PIR-TF-550-DT. The maximum effective detection extends up to 15 meters (50 feet) from the sensor. Using the included mounting bracket and subsequently adjusting the direction of the sensor, the installer may maximize the coverage area and detection distance for any given installation.

LUX LEVEL SETTING

This setting may be needed if using the sensor for lighting control. The internal light sensitive sensor allows installer to inhibit the relay output if the ambient light level (LUX) exceeds the set value. 4 different levels can be selected by placing the jumper on various pin positions.

When sensor verifies occupancy, setting at “A” represents the control relay will only be activated when ambient light level is extremely low (very dark at night).

Setting at “B” represents that control relay will be activated at late dusk or early dawn.

Setting at “C” represents that control relay will be activated at early dusk or late dawn.

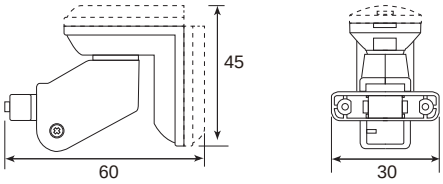
Setting at “D” represents that control relay will be activated.

NOTE!

For further functions please see our installation instruction.

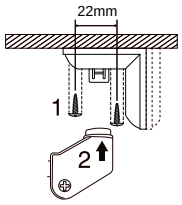
DIMENSIONS

Mounting bracket MB-100, for ceiling- and wall mounting

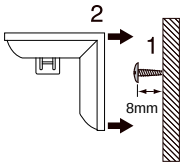


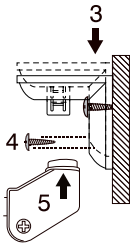
MOUNTING

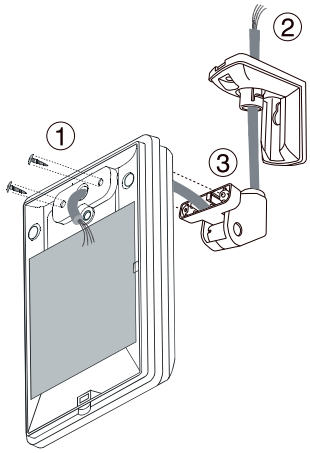
Ceiling mount



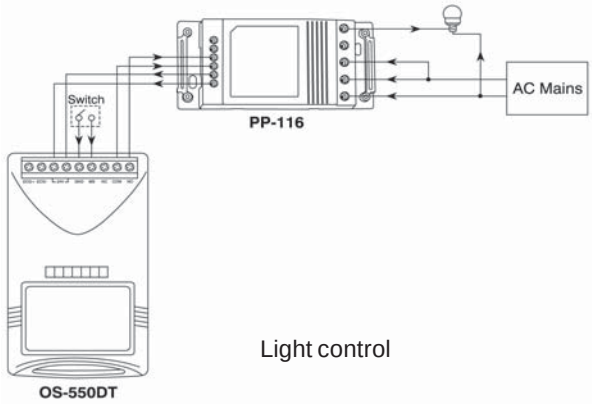
Wall mount



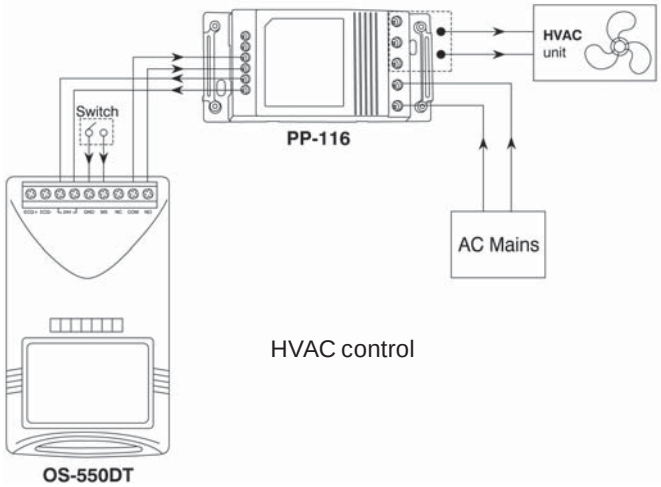




APPLICATION EXAMPLE



Light control



HVAC control

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