COMBINATION SENSOR

COM-50XTL OUTDOOR 165ft (50m)

FC

Combination of Microwave and Photoelectric beam reduces drastically the false alarm compared with the usual sensors

DOUBLE MODULATION

Double modulated beams are designed to distinguish the external lights. It increases the reliability in the outdoor security system.

STRONG UNDER HARSH ENVIRONMENT

The microwave sensor adopted in the upper part reduces malfunctions caused by environmental degradation, such as fog, snow and heavy rain with AND protection.

HEIGHT ADJUSTMENT

Mounting height is adjustable after mounting the sensor to minimize the influence of reflected microwave from the ground.

DUAL ALARM OUTPUT

Environmental output is switchable to alarm output for CCTV activation switch.

INSECT/WATER PREVENT

Anti-insect bushing and special gasket enable IP65 rated tight housing.

ANTI-BIRD SPIKE

Keeps birds and small animals away from the sensor, signIticantly reducing false alarms.

DRIP-PROOF HOUSIN

Prevents rain and snow from streaming down the front side of housing, reducing false alarm.

DUAL RING SIGHT

Enables better and clear view for easy beam alignment.

TARGET COLOR

The vivid color of the internal structure can be recognized easily at distance during the beam alignment procedure.
The color differs between a transmitter and a receiver for easy installation and checking.

WIRELESS ALIGNMENT CHECKER

Enables easy and accurate beam alignment.
(Sold separately)

LIGHTNING PROTECTION

˄The surge protection is improved in order to reduce the damage caused by induced lightning (improved by 10 times as much as COM-IN-50HF)
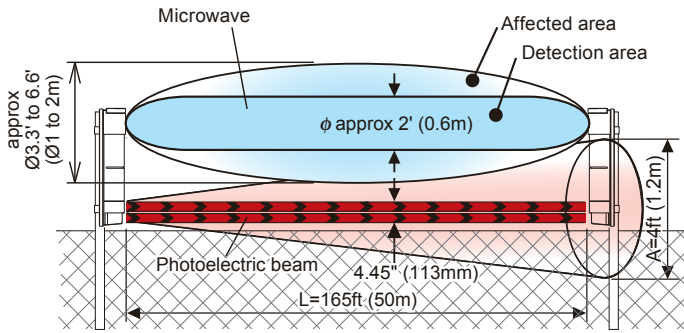* This does not guarantee a failure by lightning strike.

LIGHTNING PROTECTION

With new Pole mounting attachment, mounting sensors to the pole back to back gets easier.
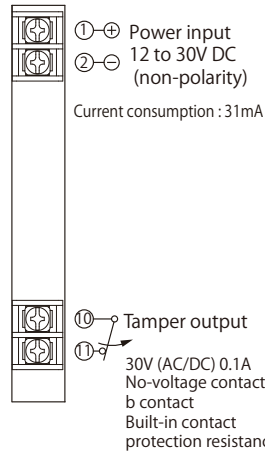
COMBINATION SENSOR

Detection area

※Depending on the distance (L), the spread of light (A) will increase in proportion to the formula below.

A=4ft (1.2m)/165ft (50m)× L
A : Spread of photoelectric light
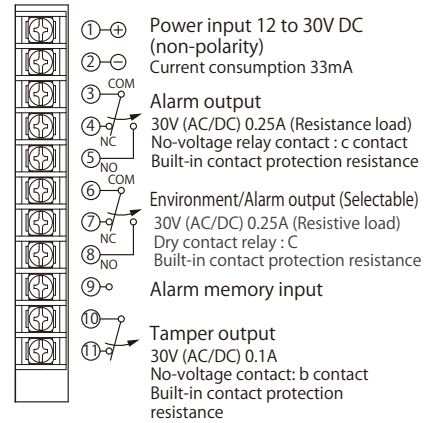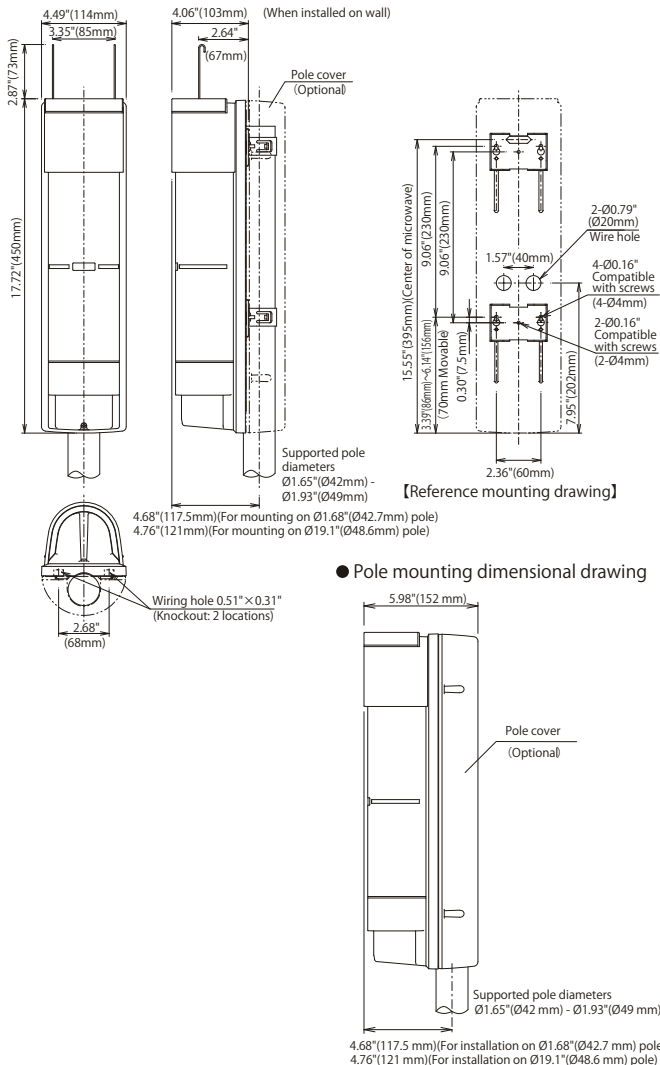L : Detection distance

Terminal configuration

〈Transmitter〉

① ⊕ Power input
② ⊖ 12 to 30V DC (non-polarity)

Current consumption : 31mA

⑩ Tamper output
⑪ 30V (AC/DC) 0.1A No-voltage contact : b contact Built-in contact protection resistance

〈Receiver〉

① ⊕ Power input 12 to 30V DC (non-polarity)
② ⊖ Current consumption 33mA

③ COM
④ NC Alarm output 30V (AC/DC) 0.25A (Resistance load)
⑤ NO No-voltage relay contact : c contact Built-in contact protection resistance

⑥ COM
⑦ NC Environment/Alarm output (Selectable) 30V (AC/DC) 0.25A (Resistive load)
⑧ NO Dry contact relay : C Built-in contact protection resistance

⑨ Alarm memory input

⑩ Tamper output
⑪ 30V (AC/DC) 0.1A No-voltage contact: b contact Built-in contact protection resistance

External dimensions

Unit : inch (mm)

4.49"(114mm)
3.35"(85mm)
2.87"(73mm)
17.72"(450mm)

4.06"(103mm)
2.64"(67mm)
(When installed on wall)

Pole cover (Optional)

Supported pole diameters Ø1.65"(Ø42mm) - Ø1.93"(Ø49mm)

4.68"(117.5mm)(For mounting on Ø1.68"(Ø42.7mm) pole)
4.76"(121mm)(For mounting on Ø19.1"(Ø48.6mm) pole)

Wiring hole 0.51"× 0.31" (Knockout: 2 locations)
2.68"(68mm)

9.06"(230mm)(Center of microwave)
9.06"(230mm)
15.55"(395mm)
6.14"(156mm)
3.39"(86mm)
(70mm Movable)
0.30"(7.5mm)
7.95"(202mm)
2.36"(60mm)

2-Ø0.79" (Ø20mm) Wire hole
1.57"(40mm)
4-Ø0.16" Compatible with screws (4-Ø4mm)
2-Ø0.16" Compatible with screws (2-Ø4mm)

【Reference mounting drawing】

● Pole mounting dimensional drawing

5.98"(152 mm)

Pole cover (Optional)

Supported pole diameters Ø1.65"(Ø42 mm) - Ø1.93"(Ø49 mm)

4.68"(117.5 mm)(For installation on Ø1.68"(Ø42.7 mm) pole)
4.76"(121 mm)(For installation on Ø19.1"(Ø48.6 mm) pole)

Specifications

Model	COM-50XTL
Detection system	Microwave : Microwave interruption system Photoelectric beam : Near infrared pulsed beam interruption system (TR-RE 2 beam simultaneous interruption)
Microwave frequency	24.11GHz
Infrared beam	Double modulation pulsed beam by LED
Protection distance	Outdoor 165 ft (50m) or less
Max. arrival distance	1650 ft (500m)
Response time	Microwave : 0.04 / 0.3 sec. (selectable with DIP switch) Photoelectric beam : 0.05 to 0.7 sec. (changeable with volume switch)
Power supply	12 to 30V DC (Non Polarity)
Current consumption	Transmitter : 31mA or less (when armed & Max.) Receiver : 24mA or less (when armed) 33mA or less (Max.)
Alarm output	Dry contact relay output form C Contact action : Interruption time (Min.2sec.) Contact capacity : 30V (AC/DC) 0.25A (resistive load) Protective resistor
Environmental / alarm output	Dry contact relay output form C *Environment/Alarm selectable Contact action : (Env.) Activated when weather condition gets worse (Alarm) Synchronized with alarm output Contact capacity : 30V (AC/DC) 0.25A (resistive load) Protective resistor
Tamper output	Dry contact relay output form b(N.C.) Action : Activated when cover is detached Contact capacity : 30V (AC/DC) 0.1A (resistive load) Protective resistor
Alarm LED	Red LED (Receiver) ON : when an alarm is initiated
Attenuation LED	Red LED (Receiver) ON : When beam is attenuated
Functions	Modulation frequency selectable, Tone indicator, Transmitting power indicator,Alarm memory indication, Programmed AGC, Auto-gain lock, Monitor jack, Tamper, Response time adjustment, MW/Beam changeover, Reception sensitivity display, Environmental module, Wireless checker connectable
Area adjustment range	Horizontal : ±90° Vertical : ±10°
Ambient temperature range	-13 to +140°F (-25 to +60°C)
Mounting position	Indoor, Outdoor (IP65)
Wiring	Terminals
Weight	Transmitter : 56oz (1,600g) Receiver : 57.8oz (1,650g)
Appearance	Resin (wine red)

TAKEX TAKENAKA ENGINEERING CO., LTD.