INSTALLATION MANUAL
TIS ENERGY SERVANT
Ceiling Sensor with 10 Functions
Model: ES-10F-CM

TIS CONTROL EVERYTHING

PRODUCT INFORMATION

This product is a ceiling sensor designed to detect movement and adjust other components based on room occupency for utmost automartion and efficiency.

PRODUCT SPECIFICATIONS			
	Input	PIR motion sensor Digital input. Open / Close Length of connected wire to DI Light intensity sensor IR receiver Temp sensor	Dual element pyro-electric ceramic 2 Channels < 350 meter 0 – 8000 Lux meter TIS infrared code receiver Temp resistance sensor
	Temperature range	Operation Storage Transport	-10…60°C -20…50°C -25…75°C
TISBUS	**TIS Bus**	Number of devices on 1 line Bus voltage Current consumption	Max. 64 12-32 V DC <15 mA / 24 V DC
	PIR Detection	PIR range PIR detection angle	4-6 meters (installation height 2.6 - 3 meters) 110° from the celling down
	Operation	Programming button Indicator LED TIS bus Upgrading	For assignment of the physical address Blue or Red LED (optional) TIS protocol maessages & commands 1 X mini USB for upgrading
	Functions	Logic/ Timers IR code memory / Flags Security function IR receiver	32 Timers and logic conditions 250 IR code memory & flags Away, Night, Day, Fire alarm modes 8 buttons function
	Weight	Without packaging	60g
	Dimensions	Width × length × height	39 mm × 92mm × 92mm
	Housing	Materials Casing color Base color IR window cover IP rating	Fireproof ABS & PC White Black Transparent white IP 20
	Air humidity		<85% non-condensing

BARCODE (UPC-A)

6 58921 79865 2

CE RoHS COMPLIANT FC

Read Instructions

We recommend that you read this Instruction Manual before installation.

Mounting Location

Install in a dry, indoor area with a suitable temperature and humidity range.

Safety instructions

Electrical equipment should only be installed and fitted by electrically skilled persons.
Failure to follow the instructions may cause damage to the device and other hazards.
These instructions are an integral part of the product and must remain with the end customer.

Data Cable

Use screened stranded RS485 data cable with four twisted pairs. Configure devices in a “Daisy Chain.”
Do not cut or terminate live data cables.

Warranty

There is a two-year warranty provided by law. The hologram warranty seal and product serial number are available on each device.

Programming

Advanced programming requires knowledge of the TIS Device Search software and instruction in the TIS advanced training courses.

Simple Installation

You can use 2 screws to install this sensor on the ceiling

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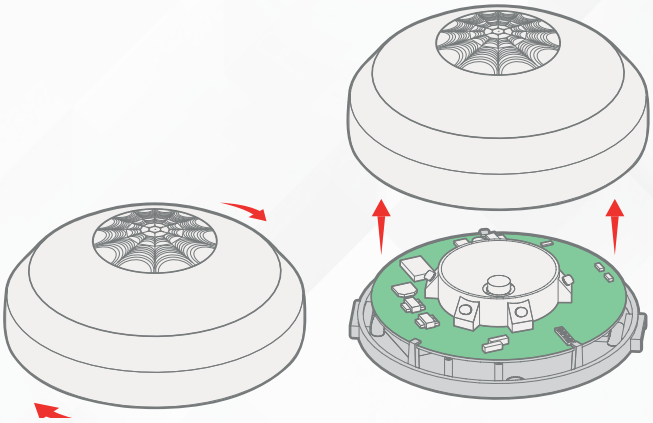
INSTALLATION STEPS

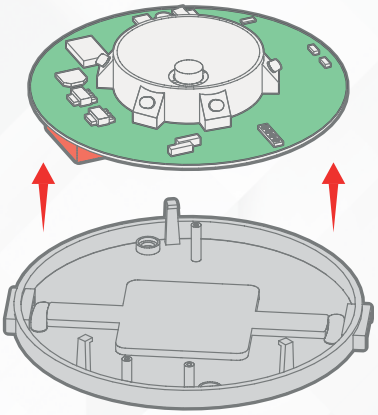
1 Turn off TIS power supply.

WARNING! HIGH VOLTAGE

2 Rotate the sensor cover to open it.

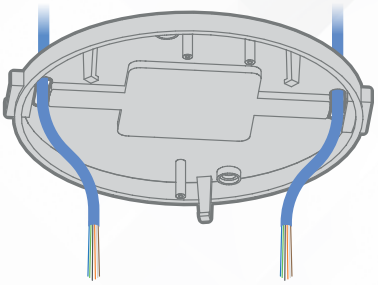


3 Remove the PCB from the holding pins.



4 Open the wire holes, and insert the TIS-BUS cable and other 3rd-party digital input (dry contact) cable in the sensor base.

For more information on how different types of 3rd-party sensors connect to this module, please refer to the sensor's connection diagram file.



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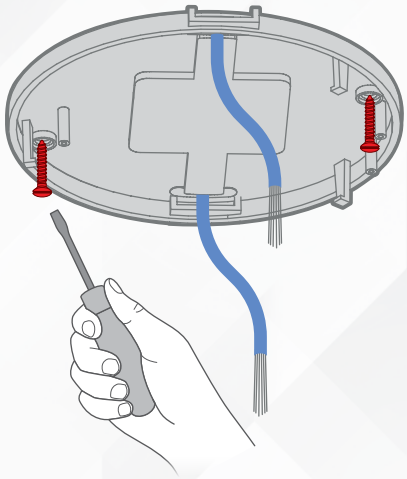
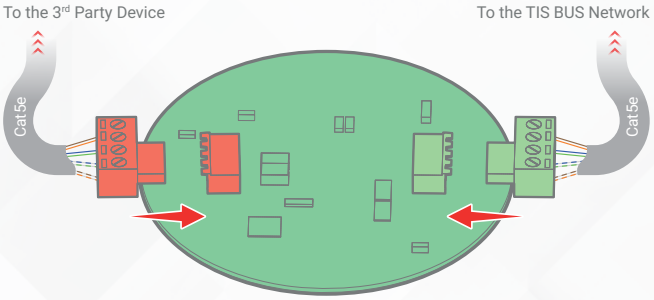
INSTALLATION STEPS

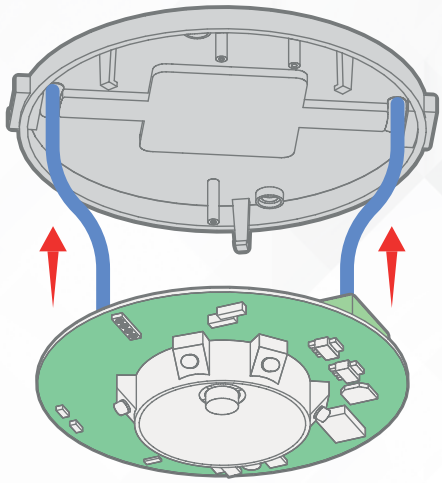
5 Mount the sensor base on the ceiling with 2 screws.



6 Connect the cables to the 4-pin terminals and Insert the terminals in the board. Make sure to connect the BUS cable to the green connector and the dry contact cable to the red connector.



7 Secure the board inside the sensor base using the base pins.



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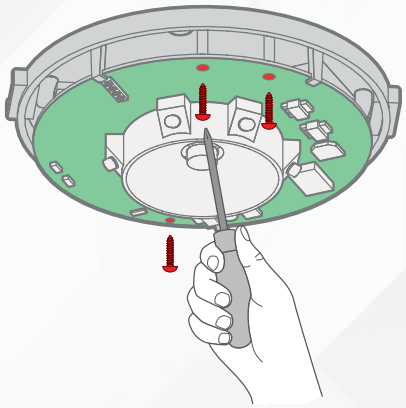
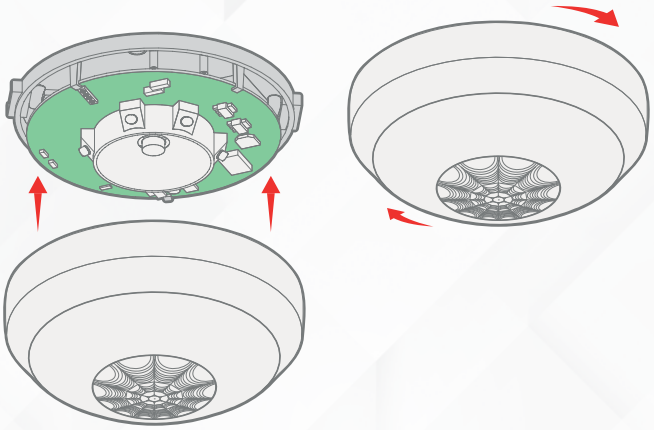
INSTALLATION STEPS

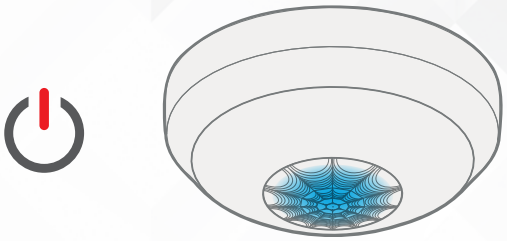
8 Install the extra 3 screws (optional).



9 Close the cover of the sensor.



10 Turn the power supply ON. The sensor LED should turn on.



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TROUBLESHOOTING

The sensor's LED blinks rapidly.	**Reason:** The sensor address conflicts with another device in the TIS network. You need to press and hold on the sensor PCB PRG button for 6 seconds so that the sensor can get a new address.
The sensor's LEDs do not turn ON, and the device is not powered.	**Reason:** The TIS 24V power supply is not connected to the TIS-BUS.
The sensor fails to control the device channels.	**Reason 1:** The TIS-BUS connection has a problem, or the wire has a short. **Reason 2:** The programming address is faulty.
The sensor LED is always off, but it works fine.	**Reason:** LED is disabled in the software.
The sensor's sensitivity is not strong.	**Reason 1:** The sensitivity level is reduced in the software. **Reason 2:** The ceiling where the sensor is installed is not high enough.

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