

# TFD-3250

Conventional Optical Smoke + Fixed Heat  
Detector (Multisensor)  
Installation & Operating Guide



Issue Date: 07/12/2017  
Rev:02

## Important Warnings

### General

- ✓ Before using the device read this manual carefully. Keep it just in case of necessity.
- ✓ Abide all the rules and precautions stated in the manual. Follow all the instructions one by one.
- ✓ Keep the devices away from water and moisture

### Conditions

Do not energize the device above or below the given limits of extreme hot or cold conditions,  
Temperature: Between -10°C and +70°C  
Relative Humidity: %95 RH max

### Service

Do not try to fix the device on your own. Removal of cover may end up with electricity shock.

In case of any defect or malfunction, contact with your dealer or with authorized service. All the technical interventions have to be done by technicians of company.

**Warning:** Do not attempt to remove the electronic board from its plastic case. The electronic board is closed for your safety. Users should avoid from interference.

### Malfunctions that require technical service

In case of any malfunction or below conditions contact with your authorized service,

- ✓ When Mains cable or the plug is harmed,
- ✓ Contact of device with a fluid,
- ✓ Exposure of rain and water,
- ✓ Fell down of device or harmed outer cover,
- ✓ Serious performance fall on the device,
- ✓ Depending on the instructions stated in manual, if your device not working properly

Contact with your authorized service in such terms.

### Maintenance on your own

Do not try to fix the device on your own. Removal of cover may end up with electricity shock. In case of any defect or malfunction, contact with your dealer or with authorized service. All the technical interventions have to be done by technicians of company. Device must be cleaned up with a dry fabric. No-chemicals are allowed for cleaning

### Transportation

Device must be carefully transported avoiding all physical bump, stroke and possible fluid entry. Malfunctions that caused by improper transportation is not under warranty.

### Human and Environmental Health

This device contains no chemical or biological elements that could harm human condition.

## General Features

- ✓ Advanced smoke detection algorithm that minimizes false alarms
- ✓ The detector is in the A2S class and alarms at 55 ° C in this conditions
- ✓ Rejection of transient signals that can be detected as alarms
- ✓ Adaptive intelligent protection by constantly sampling the environment
- ✓ Dust algorithm and warning to understand that it is getting polluted and unable to detect
- ✓ Easy to clean smoke chamber
- ✓ Ability to connect an remote indicator
- ✓ Two leds used for status indicators
- ✓ 15s start time
- ✓ Compatible with TFA-0120 Universal Detector Base

## Technical Features

Power Input	18V(min) – 30V(max)
Average Current Consumption	30uA (@24V)
Maximum Alarm Current	50mA (@24V) – (470ohm resistance limited)
Maximum External Device Current	10mA (@24V) – (2K2 resistance limited)
Operating Temperature Range	-10°C ~ +70°C (14°F ~ 158°F)
Humidity	95% RH (max)
Dimensions (mm)	Ø110, h42
Housing Material	White Color, ABS Plastic
Used Cable Cut	0.4mm <sup>2</sup> ~ 1.5mm <sup>2</sup>
Weight (incl. Base / excluding base)	183 gr / 125 gr
Startup Time	15 sn

## Indicator Leds

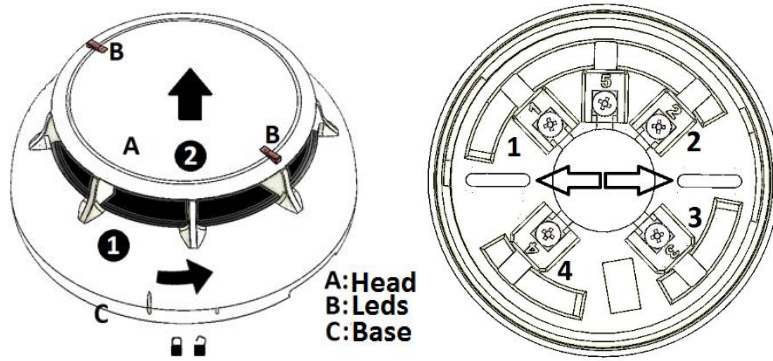
	Blue Led	Red Led
When the unit is first energized for 15 s, while sampling the environment	Blinks for 5s period	X
Any error condition (dust or power failure)	Blinks for 1s period	X
In normal operating condition	Blinks for 20s period	X
In alarm condition	X	It is constantly lit

## Terminals

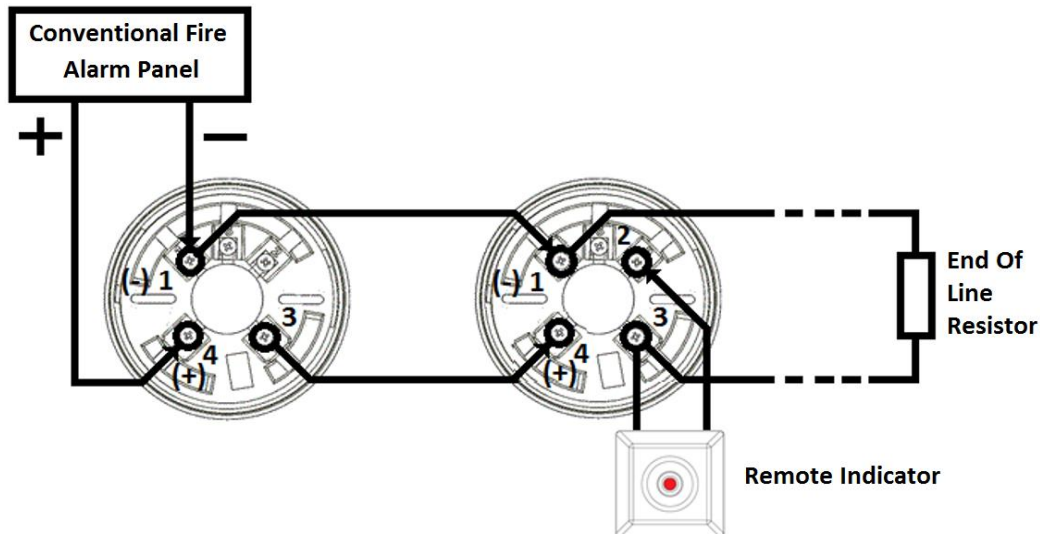
Number 1	Negative (-) power input
Number 2	Negatif(-) input of the remote indicator
Number 3	Positive supply out and Positive (+) input of remote indicator
Number 4	Positive (+) power input
Number 5	Earth connection

## Mounting and Connection

1. Remove the head of the detector by pulling it upwards (2) by turning it (1) up to the short line in the direction of the counterclockwise direction as seen from the base.
2. Mount the base using the 2 mounting locations shown.



3. Make the cable connection according to the following diagram. Make a connection with pole 4 + pole and pole 1 - by taking pole + number 3 from pole 3 of the next detector.
4. Use the 3 (+) and 2 (-) connections for the remote indicator.
5. Replace the detector head. Make sure the line on the head matches the long line on the base
6. Give the detector power from alarm panel. In the absence of an alarm, the LED on the detector indicates that it is operating with a blue color for approximately 20 seconds. (the first 15 seconds a blue LED lights up in the detector for 5 seconds).



## Test

### Smoke Test:

For the smoke test, allow the smoke to enter the smoke detection chamber for at least 1 minute with a flammable material or a test aerosol. When enough amount of smoke enters the chamber, the LED illuminates and reports the alarm.

1. Remove the smoke source when the alarm condition is reached.
2. Check that the red LEDs are lit continuously. Reset the detector on the panel.
3. If the detector does not give an alarm within 1 minute, the detector should go to service.
4. The system can be activated after the test has been performed.

### Heat Test:

For the detector test it is sufficient to provide air flow at a temperature of about 70 ° C.

1. Open the hot air flow and check the temperature.
2. Hold the hot air into the detector. The detector should give an alarm within 30 seconds.
3. Check that the red LEDs are lit continuously. Reset the detector on the panel.
4. System can be activated after test



1922

### Bilgi Elektronik San. ve Tic. A.Ş.

Dudullu OSB 1. Cad. İsmet Tarman İş Merkezi

No:1 Kat:2 No:32 Ümraniye / İstanbul

17

1922-CPD-0939

EN 54-7:2000; EN 54-7:2000/A1:2002; EN 54-7:2000/A2:2006

Point type smoke detector (Ionization)

EN 54-5:2000; EN 54-5:2000/A1:2002

Point type heat detector

Class A2S

TFD-3250

Technical data: see BİLGİ-TEC-171128-2 held by the manufacturer.

## Manufacture

### Bilgi Elektronik San. ve Tic. A.Ş.

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\* 2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).