# CONVENTIONAL FIRE ALARM SYSTEM







EN54-2 EN54-4

TFP-404 supports 4 zones and maximum 32 Conventional detectors and manual call points. It is the first choice of professionals with its solid metal body design, easy installation, and high performance.

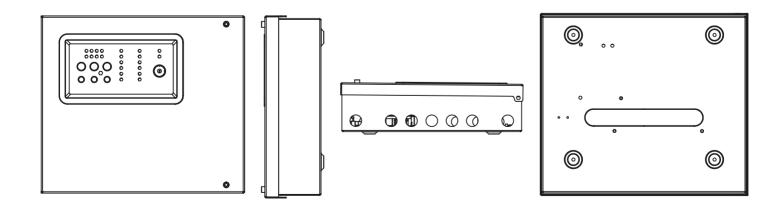
- EN 54-2 and EN 54-4 Certified
- Fully Monitorable 4 Zone Capacity
- Maximum 32 Conventional Detectors for Each Zone
- User-friendly, Easy to Manage Indicator Panel
- Separate Fire and Error LEDs for Each Zone
- Smart Battery Charging Feature Extending Battery Life
- Smart Start Feature that Prevents Direct Starting from the Battery
- Walk-through Test Function that can be Performed by a Single Person
- Disabling of Each Zone Individually

- Supervision for Siren Outputs and Zone Inputs Against Faulty
- Connections with EOL Resistances
- 2X 500mA Siren Outputs Allowing Maximum 50 Sounder Connection (if used Teknim TFS-3192 sounders)
- 24VDC 500mA External Supply Output with Automatic Fuse (AUX)
- 1X NC/NO Fire Relay (Button alarm, detector alarm, etc.)
- 1X NC/NO Error Relay (Energy failure, zone failure, battery failure etc.)
- Key Lock to Prevent Unauthorized Access
- Switch Mode Power Supply (SMPS) (27.6VDC SMPS 1.5Ah Automatic Fuse)





General Specifications	
Standard	EN54-2 / EN54-4
Zones	4
Maximum Numbers of Detectors	32
EOL	4K7 ohm, %5, 1/4W
Operating Voltage	230 / 110 VAC (+%10 / -%15)
Operating Frequency	50 / 60 Hz (±%5)
Power Fuse	2A
Backup Battery	2X 12V, 7Ah
Imin	75mA
ImaxA	500 mA
ImaxB	1,5 A
Number of Monitored Sounder Outputs	2X 500mA
Sounder EOL	4K7 ohm, %5, 1/4W
General Error Relay	1X NC/NO Dry Contact, 30V 2Ah
Fire Relay	1X NC/NO Dry Contact, 30V 2Ah
AUX	1X 24VDC 500mA
Dimensions (mm)	340 x 300 x 100 mm
Body material and color	Metal - Light Grey
Weight	4,4Kg (Without Battery)
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30
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EN54-2 EN54-4

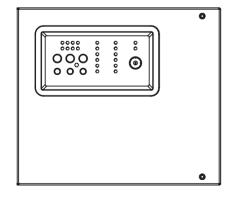
TFP-408 has 8 zones and maximum 32 Conventional fire detectors and manual call points can be connected to each zone. It is the first choice of professionals with its elegant metal body design, easy installation and high performance. The panel meets all technical values required under European Standards.

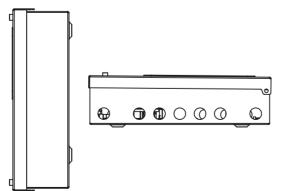
- Maximum 32 Conventional Detectors for Each Zone
- User-friendly, Easy to Manage Indicator Panel Separate Fire and Error LEDs for Each Zone
- Smart Battery Charging Feature Extending Battery Life
- Smart Start Feature that Prevents Direct Starting from the Battery
- Walk-through Test Function that can be Performed by a Single
- Disabling of Each Zone Individually
- Supervision for Siren Outputs and Zone Inputs Against Faulty Connections with EOL Resistances
- 2X 500mA Siren Outputs Allowing Maximum 50 Sounder Connection (if used Teknim TFS-3192 sounders)
- 24VDC 500mA External Supply Output with Automatic Fuse (AUX)
- 1X NC/NO Fire Relay (Button alarm, detector alarm, etc.)
- 1X NC/NO Error Relay (Energy failure, zone failure, battery failure
- Key Lock to Prevent Unauthorized Access
- Switch Mode Power Supply (SMPS) (27.6VDC SMPS 1.5Ah Automatic Fuse)

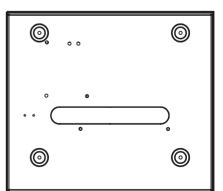




General Specifications         TEP-468           Standard         EN54-2 / EN54-4           Zones         8           Maximum Numbers of Detectors         32           EOL         4K7 ohm, %5, 1/4W           Operating Voltage         230 / 110 VAC (+%10 / -%15)           Operating Frequency         50 / 60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X 12V, 7Ah           Imin         75 mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Veight         4.4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH           Protection Class         1P30		
Zones         8           Maximum Numbers of Detectors         32           EOL         4K7 ohm, %5, 1/4W           Operating Voltage         230/110 VAC (+%10/-%15)           Operating Frequency         50/60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X12V, 7Ah           Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500 mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1X NC/NO Dry Contact, 30V, 2A           Fire Relay         1X 24VDC 500mA           AUX         1X 24VDC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4.44g (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH		
Maximum Numbers of Detectors         32           EOL         4K7 ohm, %5, 1/4W           Operating Voltage         230 / 110 VAC (+%10 / -%15)           Operating Frequency         50 / 60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X 12V, 7Ah           Imin         75 mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500 mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24V DC 500 mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Standard	EN54-2 / EN54-4
EDL         4K7 ohm, %5, 1/4W           Operating Voltage         230 / 110 VAC (+%10 / -%15)           Operating Frequency         50 / 60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X 12V, 7Ah           Imin         75mA           ImaxA         500 mA           Number of Monitored Sounder Outputs         2X 500 mA           Sounder EQL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24V DC 500 mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Zones	8
Operating Voltage         230 / 110 VAC (+%10 / -%15)           Operating Frequency         50 / 60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X X12V, 7Ah           Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1X NC/NO Dry Contact, 30V, 2A           Fire Relay         1X X AV/NO Dry Contact, 30V, 2A           AUX         1X 24VDC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Maximum Numbers of Detectors	32
Operating Frequency         50 / 60 Hz (±%5)           Power Fuse         2A           Backup Battery         2X 12V, 7Ah           Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24VDC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	EOL	4K7 ohm, %5, 1/4W
Power Fuse         2A           Backup Battery         2X 12V, 7Ah           Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24VDC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Operating Voltage	230 / 110 VAC (+%10 / -%15)
Backup Battery         2X 12V, 7Ah           Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24V DC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4.4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Operating Frequency	50 / 60 Hz (±%5)
Imin         75mA           ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24VDC 500mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Power Fuse	2A
ImaxA         500 mA           ImaxB         1,5 A           Number of Monitored Sounder Outputs         2X 500 mA           Sounder EOL         4K7 OHM, %5, 1/4W           General Error Relay         1 X NC/NO Dry Contact, 30V, 2A           Fire Relay         1 X NC/NO Dry Contact, 30V, 2A           AUX         1X 24V DC 500 mA           Dimensions (mm)         340 x 300 x 100 mm           Body material and color         Metal - Light Grey           Weight         4,4kg (Without Battery)           Operating Temperature         -10°C ~ 55°C           Humidity         95% RH	Backup Battery	2X 12V, 7Ah
ImaxB1,5 ANumber of Monitored Sounder Outputs2X 500mASounder EOL4K7 OHM, %5, 1/4WGeneral Error Relay1X NC/NO Dry Contact, 30V, 2AFire Relay1X NC/NO Dry Contact, 30V, 2AAUX1X 24VDC 500mADimensions (mm)340 x 300 x 100 mmBody material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	Imin	75mA
Number of Monitored Sounder Outputs  Sounder EOL  4K7 OHM, %5, 1/4W  General Error Relay  1 X NC/NO Dry Contact, 30V, 2A  Fire Relay  1 X NC/NO Dry Contact, 30V, 2A  AUX  AUX  1X 24VDC 500mA  Dimensions (mm)  340 x 300 x 100 mm  Body material and color  Weight  4,4kg (Without Battery)  Operating Temperature  -10°C ~ 55°C  Humidity  95% RH	ImaxA	500 mA
Sounder EOL4K7 OHM, %5, 1/4WGeneral Error Relay1 X NC/NO Dry Contact, 30V, 2AFire Relay1 X NC/NO Dry Contact, 30V, 2AAUX1X 24VDC 500mADimensions (mm)340 x 300 x 100 mmBody material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	ImaxB	1,5 A
General Error Relay1 X NC/NO Dry Contact, 30V, 2AFire Relay1 X NC/NO Dry Contact, 30V, 2AAUX1X 24VDC 500mADimensions (mm)340 x 300 x 100 mmBody material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	Number of Monitored Sounder Outputs	2X 500mA
Fire Relay1 X NC/NO Dry Contact, 30V, 2AAUX1X 24VDC 500mADimensions (mm)340 x 300 x 100 mmBody material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	Sounder EOL	4K7 OHM, %5, 1/4W
AUX 1X 24VDC 500mA  Dimensions (mm) 340 x 300 x 100 mm  Body material and color Metal - Light Grey  Weight 4,4kg (Without Battery)  Operating Temperature -10°C ~ 55°C  Humidity 95% RH	General Error Relay	1 X NC/NO Dry Contact, 30V, 2A
Dimensions (mm)340 x 300 x 100 mmBody material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	Fire Relay	1 X NC/NO Dry Contact, 30V, 2A
Body material and colorMetal - Light GreyWeight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	AUX	1X 24VDC 500mA
Weight4,4kg (Without Battery)Operating Temperature-10°C ~ 55°CHumidity95% RH	Dimensions (mm)	340 x 300 x 100 mm
Operating Temperature -10°C ~ 55°C Humidity 95% RH	Body material and color	Metal - Light Grey
Humidity 95% RH	Weight	4,4kg (Without Battery)
	Operating Temperature	-10°C ~ 55°C
Protection Class IP30	Humidity	95% RH
	Protection Class	IP30







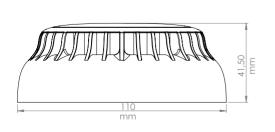


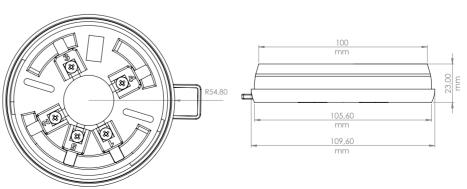


TFD-4230 Conventional Optical Smoke Detector uses advanced Light Scatter technology to detect smoke entering in its chamber. Detector provides maximum level of protection with its advanced optical sensing technology. It has a series of software algorithms to minimize faulty detections and to provide pollution warning. Smoke chamber can be easily removed for cleaning in case of possible pollutions in excessively dusty environments.

- EN54-7 Certified
- Detects Smoke Particles in the Environment via Light Scatter Principle
- Supports 2X LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Special Software Algorithms to Eliminate Sudden Dust, Smoke, etc. Which May Cause Faulty Alarms
- Supports Remote Indicator Connection
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

<b>Technical Specifications</b>	TFD-4230
Standard	EN54-7
Operating Type	Optical
Detection Level	0,15 dB/m
Power	18-30VDC
Average Consumption	30µA@24V
Alarm Consumption	50mA @24V (Limited with 470 $\Omega$ )
Indicator Current	10mA @24V (Limited with 2K2 $\Omega$ )
Starting Time	15sec.
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30





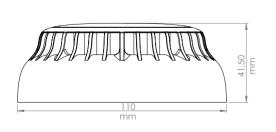


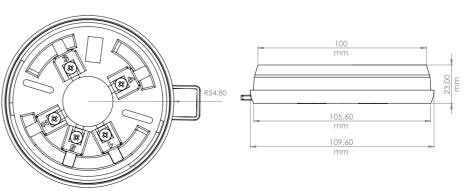


TFD-4240 Conventional Fixed heat detector uses two NTC for precise measurement of the environment to detect fire. Detector classified as A2S and will report an alarm at 55°C.

- EN54-5 Certified
- Designed with 2 NTCs to Ensure More Accurate and Precise Temperature Measurement
- Classified as A2S
- Supports 2x LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Supports Parallel Indicator Connection Terminals
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

<b>Technical Specifications</b>	TFD-4240
Standard	EN54-5
Operating Type	A2S
Power	18-30VDC
Average Consumption	30µA@24V
Alarm Consumption	50mA @24V
Indicator Current	10mA @24V
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30







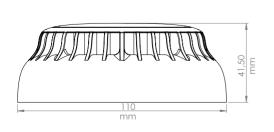


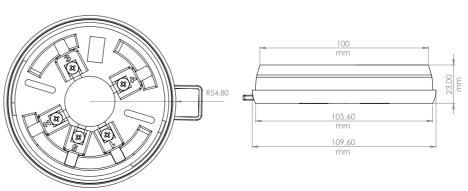
TFD-4245 Conventional rate of rise heat detector designed to detect rapid temperature rise by using 2 NTCs to make an accurate measurement in the environment.

Detector supports different special software algorithms to prevent false alarms.

- EN54-5 Certified
- Designed with 2 NTCs to Ensure More Accurate and Precise Temperature Measurement
- Classified as A2R
- Supports 2x LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Supports Parallel Indicator Connection Terminals
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

<b>Technical Specifications</b>	TFD-4245
Standard	EN54-5
Operating Type	A2R
Power	18-30VDC
Average Consumption	30µA@24V
Alarm Consumption	50mA @24V
Indicator Current	10mA @24V
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30









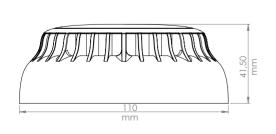
EN54-7 EN54-5

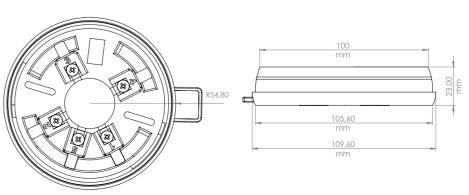
TFD-4250 Conventional Multi Detector uses optical and heat sensing technologies to detect fire condition.

Detector has a series of algorithms developed to minimize faulty detections.

- EN54-7 and EN54-5 Certified
- Detects Smoke Particles in the Environment via Light Scatter Principle
- Detector Classified as A2S for Heat Detection
- Supports 2x LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Special Software Algorithms to Eliminate Sudden Dust, Smoke, etc.
   Which May Cause Faulty Alarms
- Supports Parallel Indicator Connection Terminals
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

<b>Technical Specifications</b>	TFD-4250
Standard	EN54-7 - EN54-5
Operating Type	Optical and Heat
Detection Level	0,15 dB/m A2S (Between 55°C ~ 70°C)
Power	18-30VDC
Average Consumption	30μA@24V
Alarm Consumption	50mA @24V
Indicator Current	10mA @24V
Starting Time	15sec.
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30







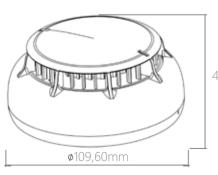


TFD-3230 Conventional Optical Smoke Detector designed to provide maximum level of protection for small and medium sized places with its advanced optical sensing technology. Detector has a series of algorithms developed to minimize faulty detections and to provide pollution warning. Smoke chamber can be easily removed for cleaning in case of possible pollutions in excessively dusty environments.

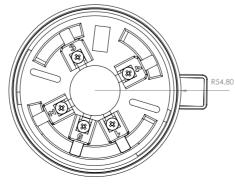
## GENERAL FEATURES

- EN54-7 Certified
- Detects Smoke Particles in the Environment via Light Scatter Principle
- Supports 2X LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Special Software Algorithms to Eliminate Sudden Dust, Smoke, etc. Which May Cause Faulty Alarms
- Supports Remote Indicator Connection Terminals
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

Standard	EN54-7
Operating Type	Optical
Detection Level	0,15 dB/m
Power	18-30VDC
Average Consumption	30µA@24V
Alarm Consumption	50mA @24V (Limited with 470 $\Omega$ )
Indicator Current	10mA @24V (Limited with 2K2 $\Omega$ )
Starting Time	15sec.
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30



41,50mm





## **TFD-32.40**Conventional Fixed Heat Detector



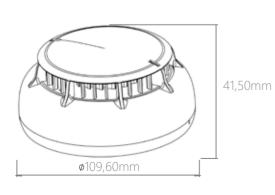


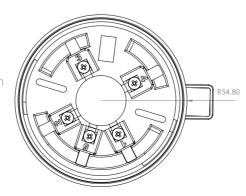
EN54-5

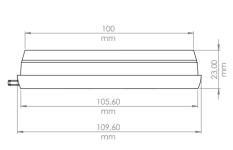
TFD-3240 Conventional fixed heat detector uses two NTC for precise measurement of the environment to detect fire. Detector classified as A2S and will report an alarm at 55°C.

- EN54-5 Certified
- Designed with 2 NTCs to Ensure More Accurate and Precise
- Temperature Measurement
- Classified as A2S
- Supports 2x LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display
- Error and Alarm Conditions (Blue/Red)
- Supports Remote Indicator Connection Terminals
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

<b>Technical Specifications</b>	TFD-3240
Standard	EN54-5
Operating Type	A2S
Power	18-30VDC
Average Consumption	30µA@24V
Alarm Consumption	50mA@24V
Indicator Current	10mA@24V
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30











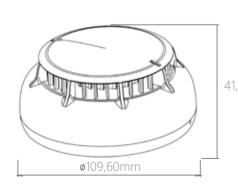
TFD-3245 Conventional rate of rise heat detector designed to detect rapid temperature rise by using 2 NTCs to make an accurate measurement in the environment.

Detector supports different special software algorithms to prevent false alarms.

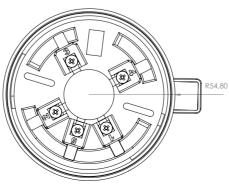
## GENERAL FEATURES

- Conforms EN54-5
- Designed with 2 NTCs to ensure more accurate and precise temperature measurement
- Detector can be operating as A2R class
- 2 LED indicators enabling 360° view
- Two different colors of indication by LEDs to individually display error and alarm conditions (Blue/Red)
- Supports remote indicator connection terminals
- Aesthetic and elegant design fits any environment
- Compatible with any brand of conventional fire pane

<b>Technical Specifications</b>	TFD-3245
Standard	EN54-5
Operating Type	A2R
Power	18V(min) – 30V(max)
Average Consumption	30µA@24V
Alarm Consumption	50mA@24V
Indicator Current	10mA@24V
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30



41,50mm









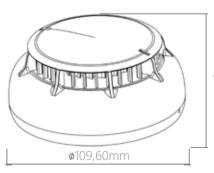
EN54-7 EN54-5

TFD-3250 Conventional Optical Smoke + Heat Detector uses optical and heat sensing technologies. Detector has a series of algorithms developed to minimize faulty detections.

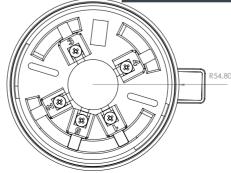
## GENERAL FEATURES

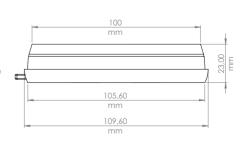
- EN54-7 and EN54-5 Certified
- Detects Smoke Particles in the Environment via Light Scatter Principle
- Detector Classified as A2S for Heat Detection
- Supports 2x LED Indicators Enables 360° view
- Two Different Colors of Indication by LEDs to Individually Display Error and Alarm Conditions (Blue/Red)
- Special Software Algorithms to Eliminate Sudden Dust, Smoke, etc.
- Which May Cause Faulty Alarms
- Supports Remote Indicator Connection Terminals
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel r

<b>Technical Specifications</b>	TFD-3250
Standard	EN54-5, EN54-7
Operating Type	Optical and Heat
Power	18V(min) – 30V(max)
Detection Level	0,15 dB/m A2S (Between 55°C-70°C)
Average Consumption	30µA@24V
Alarm Consumption	50mA@24V
Indicator Current	10mA@24V
Starting Time	15sec.
Weight (Include Base / Not)	183gr / 125gr
Dimensions (mm)	Ø110, h:42 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED
Status LED	Blue
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30



41,50mm









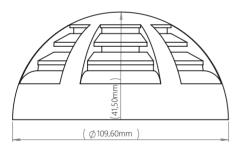


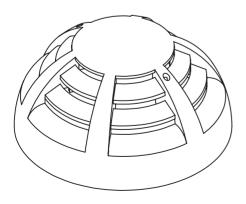
TSD-701 is a natural gas detector which can be connected to conventional fire alarm systems (NO) and Intruder alarm systems (NC) or to be used as a stand-alone device with 12-24V external power supply.

It is equipped with 85dB on-board buzzer for audio warning, and with red/yellow/ green colored led indicators for visual warning.

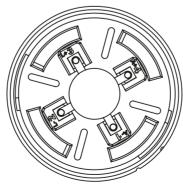
TSD-701 natural gas detector is suitable for ceiling and wall installations. Detector also provides a test button on it to perform tests for all visual and audio warnings.

- TSE TS-EN 50194-1 Certified
- 85dB Alarm Sound Level
- TEST Button for Buzzer and LEDs
- 2x LED Indicators Enable 360° View from All Directions
- NO Relay for Fire Alarm Systems and NC Relay for Intruder Alarm Systems







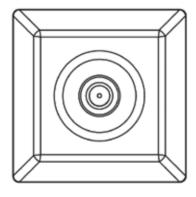


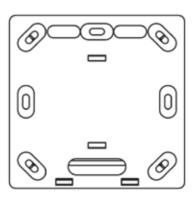


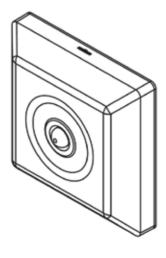


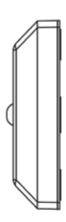
In cases where alarm LEDs are not visible due to installation of detectors on high ceilings, false ceilings, raised floor, restricted access rooms etc., this device is used as an additional indicator light. The big red LED in 10mm diameter can be seen even from high ceiling.

Technical Specifications	TFA-3196
LED	RED
Light	RED 150mcd
Power	10-32VDC .
Alarm Consumption	2,2mA@24VDC
Weight	42gr
Dimensions (mm)	85 x 85 x 21mm
Body Material and Color	ABS Plastic – White
Operating Temperature	-10°C ~ +85°C
Humidity	95% RH
Protection Class	IP30















TFB-3165 is designed to be used with all brands of conventional fire alarm systems and comply with EN54-11. Internal 470-ohm resistance allow ease of installation.

It has resettable operation structure which can be reset by using a special plastic key. Suitable for flush and surface mounting. An optional transparent protection cover can be installed to avoid false alarms by accidental pressing.

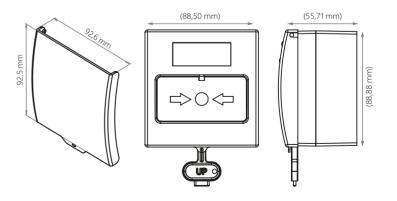
### GENERAL FEATURES

- EN 54-11 Certified
- Resettable
- NC/NO Selection
- Includes 470 Ohm Resistance, does not Require Additional Connection
   Optional Transparent Protection Cover can be Installed. Cover can be
- Suitable for Flush and Surface Mounting
- Compatible with All Conventional Fire Alarm Systems r

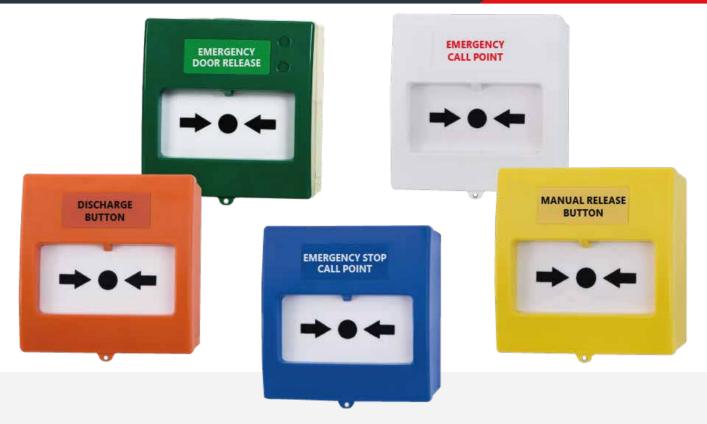
TFA-0165 Transparent Protection Cover	
iransparent Protection Cover	
<b>v</b>	

The cover is made of robust polycarbonate transparent material. It is used to prevent accidental button activation.





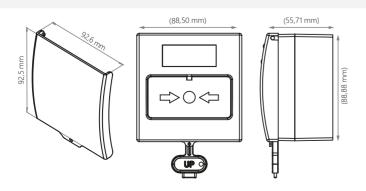




Designed to be connected to any brand of conventional fire detection systems. Internal 470-ohm resistance allow ease of installation. It is suitable for flush and surface mounting. An optional transparent protective cover can be installed. It is easily resettable via special

- Resettable Type
- NC/NO Selection
- Includes 470 Ohm Resistance, does not Require Additional Connection
- Transparent Protection Cover can be Installed. Cover can be Sealed
- Suitable for Flush and Surface Mounting
- Compatible With all Conventional Fire and Theft Alarm Systems
- **TFB-3165W,** Emergency Call Point WHITE
- TFB-3165B, Emergency Stop Call Point BLUE
- TFB-3165Y, Manual Release Button YELLOW
- TFB-3165G, Emergency Exit Door Release Button GREEN
- TFB-31650, ORANGE

The cover is made of robust poly-carbon transparent material. It is used to prevent accidental button activation.



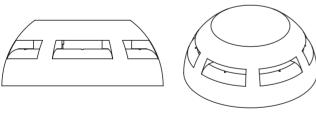
Technical Specifications	TFB-3165X
Operating Type	A Type Manual
Resettable	Yes
Relay	NC / NO / 470R
Power	5-30 VDC
Dimensions (mm)	165gr.
Weight	86x55x88mm
Color Codes	RAL 9010 White RAL 5002 BLUE RAL 1006 YELLOW RAL 6016 GREEN RAL2011 ORANGE
Type of Fragile Element	Resettable Polycarbonate
Operating Temperature	-10°C ~ 60°C
Humidity	≤93% RH at +40°C
Protection Class	IP30

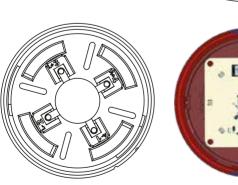




Teknim TFS-3191 fire alarm sounder have aesthetic design and low power consumption and suitable for use with any brand of fire detection systems.

- EN54-3 Certified
- Suitable for flush and surface mounting
- 100dB high sound level
- IP21C protection class
- Red/White, transparent UL94 non-flammable poly carbonate plastic frame





Technical Specifications	TFS-3191
Standard	EN-54/3
Sound Level	100dB±2 dB - (24VDC at 1 mt)
Sounder	Piezzo Element with leak-proof sealant
Power	24-28VDC
Alarm Consumption	15mA
Dimensions (mm)	Ø110, h:55 mm
Body Material	Red, UL94 anti- flammable ABS plastic
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C



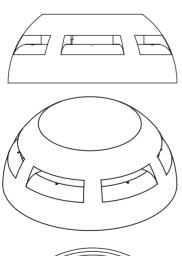


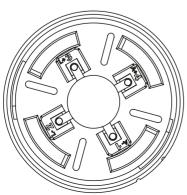


EN54-3 EN54-23

Teknim TFS-3192 internal fire alarm sounder and flasher have aesthetic design and low power consumption and are suitable for use with any brand of fire detection systems.

- EN 54-3 and EN 54-23 Certified
- Suitable for flush and surface mounting 100dB high sound level
- IP21C protection class
- Red/White, transparent UL94 non-flammable poly carbonate plastic frame





Technical Specifications	TFS-3192W/R
Standard	EN-54/3 EN-54/23
Operating Type	Sound + Flasher
Sound Level	100dB±2 dB, (24VDC at 1 mt)
Coverage	W-2,4-4
Flasher	1 sec ON / 1 sec OFF
LED	RED/WHITE
LED Specifications	Wide angle 7x Bright LED
Sounder	Piezzo Element with leak-proof sealant
Power	24-28 VDC
Alarm Consumption	19mA.
Dimensions (mm)	Ø110, h:55 mm
Body Material	ABS Plastic
Operating Temperature	-20°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C



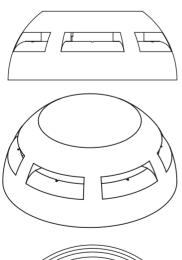


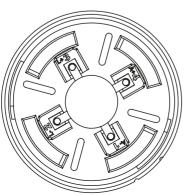


Teknim TFS-3193 internal fire alarm flasher has aesthetic design and low power consumption and are suitable for use with any brand of fire detection systems.

- EN 54-23 Certified

- Suitable for flush and surface mounting
  IP21C protection class
  Red/White, transparent UL94 non-flammable poly
  carbonate plastic frame





Technical Specifications	TFS-3193W/R
Standard	EN-54/23
Operating Type	LED
Coverage	W-2,4-4
Flasher	1 sec ON / 1 sec OFF
LED	RED/WHITE
LED Specifications	Wide angle 7x Bright LED
Power	24-28VDC
Alarm Consumption	6mA
Dimensions (mm)	Ø110, h:55 mm
Body Material	UL94 anti- flammable ABS Plastic
Operating Temperature	-20°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C

## **TFS-5792** Conventional Outdoor Fire Alarm Sounder with Flasher





TFS-5792 Sounder with flasher is a new designed for any brand of conventional fire detection systems, suitable for use in external environments.

- 6X Super Bright LED / Flasher115dB/24V @1mt
- IP65 Protection

<b>Technical Specifications</b>	TFS-5792
Operating Type	Outdoor
Sound Level	115dB±3 dB (24VDC at 1 mt)
Sounder	Piezzo Element with leak-proof sealant
Power	24-28VDC
Alarm Consumption	285 mA ± %10 (@24VDC)
Dimensions (mm)	197 X 300 X 78 mm
Body Material and Color	UL 94 Polycarbonate - RED
Operating Temperature	-10°C ~ 65°C
Humidity	95% RH
Protection Class	IP65

Standalone Multi Detector with Battery Operated

## TFD-3945

Standalone Cigarette and Heat Detector with Battery Operated





TFD-3940 and TFD-3945 are battery operated detectors which can be used stand-alone in to detect fire alarm. While TFD-3940 supports multi sensing technology with optical and heat, TFD-3945 supports cigarette smoke and heat sensing technology.

It has onboard Buzzer with 60dB sound level and provides 8 years battery lifetime with 2pcs CR123A battery. Detectors can be program easily by the button on it with different type of detection options.

- Different Type of Detection Options
- 60dB Sound Level
- Supports 2x CR123A Battery
- Years Battery Lifetime with 2x Battery
- Test and Programming Button

Technical Specifications	
Operating Type	Optical and Heat Cigarette and Hea
Average Consumption	25μA (@3V)
Alarm Consumption	20mA
Battery	2X CR123A
Battery Lifetime	8 Years
Detection Level	0.075dB/m
Heat Detection	A2S – A2R
Buzzer Sound Level	60dB@1m
Dimensions (mm)	Ø110, h:48 mm
Body Material and Color	ABS Plastic – White
Operating Temperature	-10°C ~ 70°C
Humidity	95% RH
Protection Class	IP30



TPU-8245 is designed to use in systems where required external power supply by providing 24VDC 5Ah uninterrupted power with an intelligent battery charger unit and complies with EN54-4. Both input and outputs of devices are protected against short circuit and overload. The device allows to use 7Ah or 12Ah battery options.

- EN 54-4 Certified
- Selectable Single or Dual Output
- Supports 7Ah or 12Ah Backup Battery
- Dry Contact Relay Output for Error
- Led Indicators for Fault
- Intelligent Battery Charging with Temperature Compensation
- Wide Input Voltage Range, 110 to 240VAC Protection Against Short Circuit and Overload Conditions
- Fully Enclosed and Robust Metallic Case



HEKNIM	
Technical Specifications	TPU-8245
Standard	EN54-4
Smart Charge	Yes
Error Relay	Yes
Operating Voltage	110 / 240VAC
Operating Frequency	50 / 60 Hz
Output Voltage	20~24Vdc ±%2
Maximum Output Current	5Ah
Outputs (S1 Closed, S2 Open) (S1 Open, S2 Closed)	Output-1: 5,0Ah Output-2: 0,0Ah Output-1: 2,5Ah Output-2: 2,5Ah
Backup Battery	2X 12V, 7Ah
Charging Voltage	27,6V@ 20°C
Discharge cut-off	< 20V
Dimensions (mm)	310 x 102 x 300 mm
Body material and color	Metal RAL7305 Texture
Weight	3,25Kg (Without Battery)
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30

TAEFOTA MIGLAURUS	Q.
	MINNE
Technical Specifications	TPU-8245
Standard	EN54-4
Standard Smart Charge	EN54-4 Yes
Standard Smart Charge Error Relay	EN54-4 Yes Yes
Standard Smart Charge Error Relay Operating Voltage	EN54-4 Yes Yes 110 / 240VAC
Standard Smart Charge Error Relay Operating Voltage Operating Frequency	EN54-4 Yes Yes 110 / 240VAC 50 / 60 Hz
Standard Smart Charge Error Relay Operating Voltage Operating Frequency Output Voltage	EN54-4 Yes Yes 110 / 240VAC 50 / 60 Hz 20~24Vdc ±%2
Standard Smart Charge Error Relay Operating Voltage Operating Frequency	EN54-4 Yes Yes 110 / 240VAC 50 / 60 Hz









TR6100 is a Beam detector used for fire detection particularly in large zones with high ceilings which are not suitable for standard detector mounting.

Internal Laser Pointer enables easy alignment of reflectors. It is very easy to install. It can be used with all fire detection panels

- LPCB Approved
- Flawless Alignment by Digital Guiding Screen and Laser Beam Marking
- Internal Failure Diagnosis
- Automatic Compensation in Case of Weakened Signals
- Due to Dust Accumulation, Displacement and Worn Transmitter
- Fire and Error Relay Outputs Includes Reflector Mirror
- Internal Distance Adjustment

Standard	LPCB, EN54-12, BS 5839 Part 1:2002
Operating Type	Beam Detector
Detection Distance	0-100 meters
Detection Angle	±0.5° direction
Digital Screen Guide	Nixie Tube
Alignment	Laser Beam Marker
Power	20-28VDC
Average Consumption	23mA
Alarm Consumption	33mA
Reset Time	Less than 2sec.
Relay Output	NC - NO 2.0A; 30VDC
Weight (Include Base / Not)	130gr
Dimensions (mm)	191 x 127 x 92 mm
Body Material and Color	ABS Plastic – White
Alarm Indicator LED	RED: Fire Alarm Yellow: Fault Green: Alignment
Operating Temperature	-10°C ~ 50°C
Humidity	95% RH
Protection Class	IP30





GSM/GPRS dialer is used to deliver alarm information from fire alarm panels to the users over GSM by voice call and SMS and can connect directly with the Alarm Receiving Centers to deliver alarm information via GPRS. It can also be used to remote start/stop of a product connected over PGM output via SMS. It can be used with all brand of fire alarm panels.

## GENERAL FEATURES

- 15 Seconds Sound Recording
- GPRS Connection with ARC
- 2X Zone Inputs (Fire and Error)
- 1X PGM Output
- 8X Call and 8X SMS for Each Zone
- SMS Notification when Fault on ARC Connection or Fault on Control Panel Connection
- LEDs indicating Operation, Communication and Signal statuses

TXM Modules can be program via TXM Configuration software.



Technical Specifications	TXM-0508
Power	10-24VDC
Standby Consumption	120mA
Alarm Consumption	500mA
GSM Modem Frequency	850 / 900 / 1800 / 1900 Mhz
GPRS	Yes
Sound Recording Time	15sec
Communication Format	SIA-DC-09
Zone Inputs	2x NC/NO
Outputs (PGM)	1
Number of Users Call	8x Per Each Zone
Number of Users SMS	8x Per Each Zone
SMS Character	50
Dimensions (mm)	150 x 110 x 35 mm
Operating Temperature	-20°C ~ 55°C
Humidity	95% RH