

2022



# FIRE ALARM SYSTEMS PRODUCT CATALOG

## CONTENT

WIRELESS FIRE ALARM SYSTEM  
INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM  
CONVENTIONAL FIRE ALARM SYSTEM



**teknim**®  
Fire and Security Technologies



# Table of Contents

## Wireless Fire Alarm System

Wireless Fire Alarm System.....	4-7
TWM-1885 Wireless Intelligent Addressable Coordinator.....	8
TWM-3885 Wireless Conventional Coordinator .....	9
TWM-1886 Wireless Repeater.....	10
TWD-1850 Wireless Multi Detector (Smoke and Heat).....	11
TWB-1866 Wireless Manual Call Point .....	12
TWM-1887 Wireless I/O Module .....	13
TWS-1815 Wireless Sounder and Flasher.....	14

## Intelligent Addressable Fire Alarm System

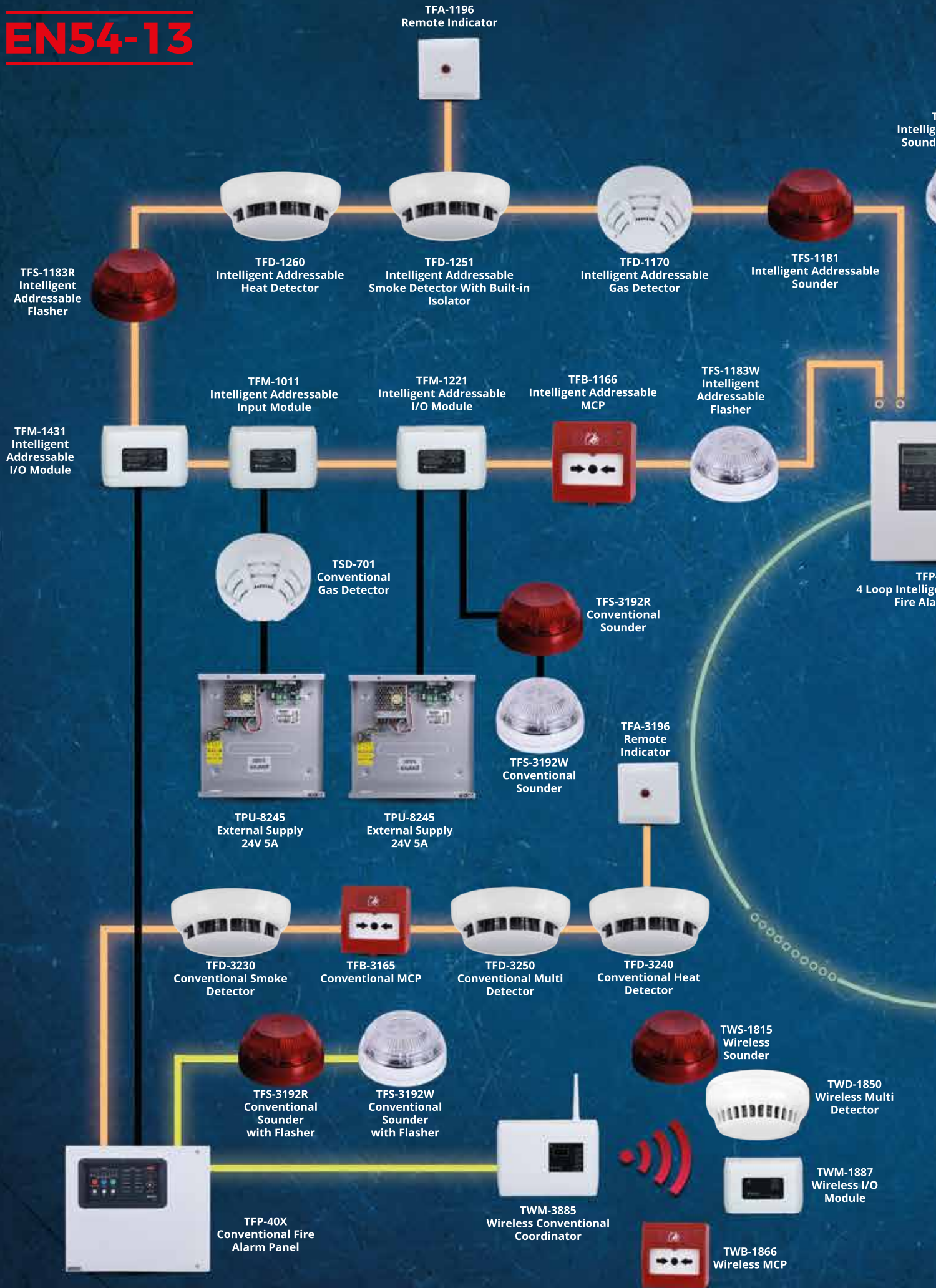
TFP-12XX Intelligent Addressable Fire Alarm Panel, 1-2-4 Loop.....	16-17
TFP-211X Intelligent Addressable Fire Alarm Panel With Zone Indicator, 1-2-4 Loop.....	18-19
TFP-213X Intelligent Addressable Fire Alarm Panel With Zone Indicator Built-in Printer, 1-2-4 Loop.....	18-19
TFP-1240 Intelligent Addressable Repeater.....	20
TFC-1209 Network Module .....	21
TFC-1201 Loop Board.....	22
TFCM-1801 Device Programmer.....	23
Teknim Mobile Application.....	24
MOSAIC-2000 Teknim Addressable Fire Alarm System Monitoring Software.....	25
TFY-1000 Teknim Addressable Fire Alarm System Configuration Software.....	26
TFD-1251/TFD-1250 Intelligent Addressable Smoke Detector .....	27
TFD-1261/TFD-1260 Intelligent Addressable Heat Detector .....	28
TFD-1271/TFD-1270 Intelligent Addressable Multi Detector.....	29
TFA-1196 Remote Indicator .....	30
TFM-128X Detector Base.....	31
TFD-1170 Intelligent Addressable Natural Gas Detector .....	32
TFB-1166 Intelligent Addressable Manual Call Point with Built-in Isolator .....	33
TFS-1181 Intelligent Addressable Sounder with Built-in Isolator .....	34
TFS-1182R/W Intelligent Addressable Sounder and Flasher with Built-in Isolator .....	35
TFS-1183R/W Intelligent Addressable Flasher with Built-in Isolator .....	36
TFM-1990 Loop Isolator.....	37
TFM-1661 Intelligent Addressable Zone and Siren Module with Built-in Isolator .....	38
TFM-1431 Intelligent Addressable Input / Output Module with Built-in Isolator .....	39
TFM-1011 / TFM 1221 Intelligent Addressable Modules with Built-in Isolator .....	40

## Conventional Fire Alarm System

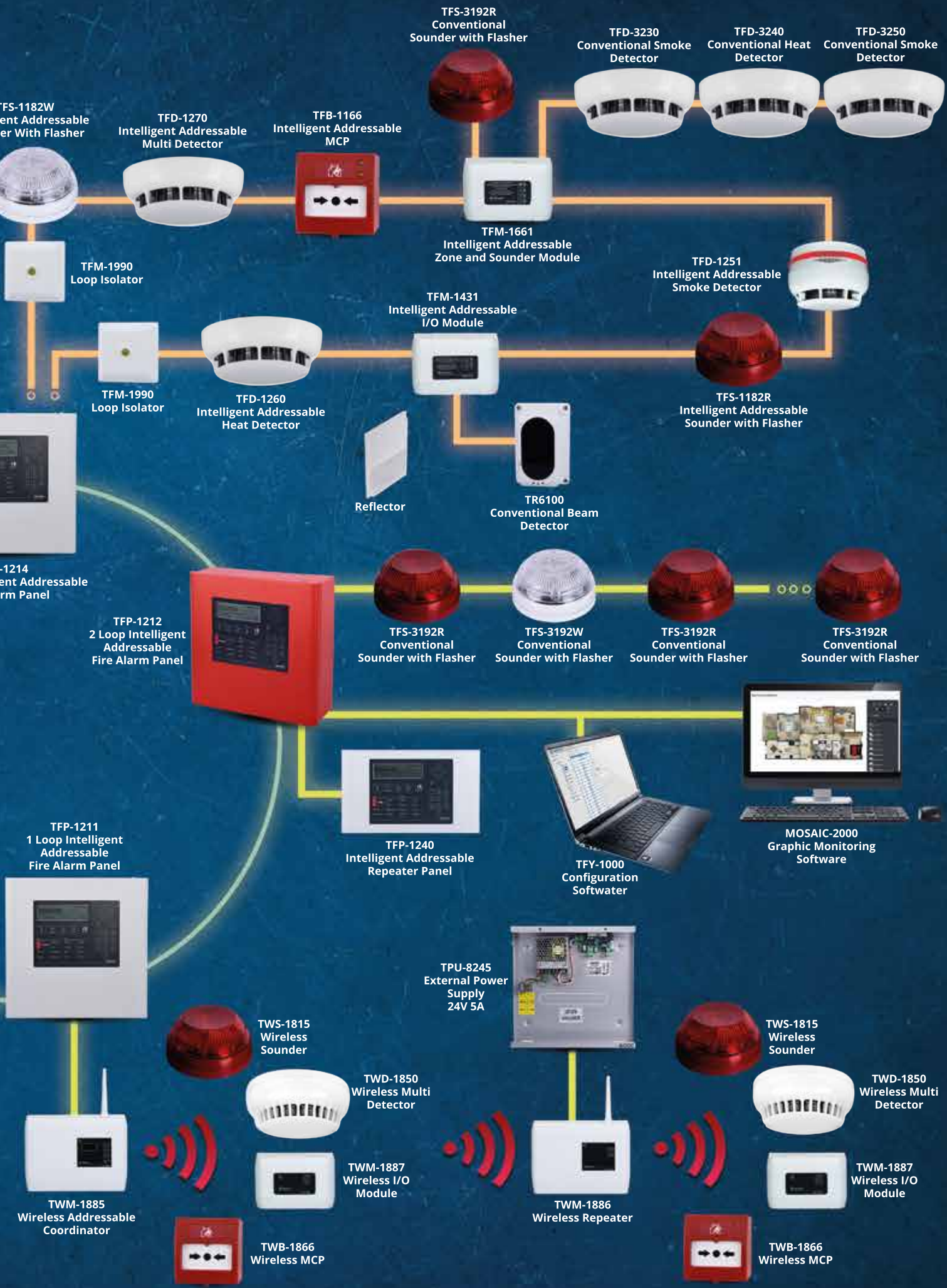
TFP-404 Conventional Fire Alarm Panel, 4 Zone.....	42-43
TFP-408 Conventional Fire Alarm Panel, 8 Zone.....	44-45
TFD-4230 Conventional Optical Smoke Detector.....	46
TFD-4240 Conventional Fixed Heat Detector.....	47
TFD-4245 Conventional Rate of Rise Heat Detector.....	48
TFD-4250 Conventional Multi Detector (Optical Smoke and Heat).....	49
TFD-3230 Conventional Optical Smoke Detector.....	50
TFD-3240 Conventional Fixed Heat Detector.....	51
TFD-3245 Conventional Rate Of Rise Heat Detector.....	52
TFD-3250 Conventional Multi Detector (Optical Smoke and Heat).....	53
TSD-701 Conventional Natural Gas Detector.....	54
TFA-3196 Remote Indicator .....	55
TFB-3165 Conventional Manual Call Point .....	56
TFB-3165X Conventional Emergency Call Points .....	57
TFS-3191 Conventional Fire Alarm Sounder .....	58
TFS-3192R/W Conventional Fire Alarm Sounder with Flasher .....	59
TFS-3193R/W Conventional Fire Alarm Flasher .....	60
TFS-5792 Conventional Outdoor Fire Alarm Sounder with Flasher .....	61
TFD-3940 / TFD-3945 Standalone Detectors .....	62
TPU-8245 External Power Supply .....	63
TR6100 Conventional Beam Detector.....	64
TXM-0508 GSM/GPRS Dialer.....	65



# EN54-13







TFP-1182W  
Intelligent Addressable  
Sounder with Flasher

TFD-1270  
Intelligent Addressable  
Multi Detector

TFB-1166  
Intelligent Addressable  
MCP

TFS-3192R  
Conventional  
Sounder with Flasher

TFD-3230  
Conventional Smoke  
Detector

TFD-3240  
Conventional Heat  
Detector

TFD-3250  
Conventional Smoke  
Detector

TFM-1990  
Loop Isolator

TFM-1661  
Intelligent Addressable  
Zone and Sounder Module

TFD-1251  
Intelligent Addressable  
Smoke Detector

TFM-1990  
Loop Isolator

TFD-1260  
Intelligent Addressable  
Heat Detector

TFM-1431  
Intelligent Addressable  
I/O Module

TFS-1182R  
Intelligent Addressable  
Sounder with Flasher

Reflector

TR6100  
Conventional Beam  
Detector

TFP-1214  
Intelligent Addressable  
2 Loop Fire Alarm Panel

TFP-1212  
2 Loop Intelligent  
Addressable  
Fire Alarm Panel

TFS-3192R  
Conventional  
Sounder with Flasher

TFS-3192W  
Conventional  
Sounder with Flasher

TFS-3192R  
Conventional  
Sounder with Flasher

TFS-3192R  
Conventional  
Sounder with Flasher

TFP-1211  
1 Loop Intelligent  
Addressable  
Fire Alarm Panel

TFP-1240  
Intelligent Addressable  
Repeater Panel

TFY-1000  
Configuration  
Software

MOSAIC-2000  
Graphic Monitoring  
Software

TPU-8245  
External Power  
Supply  
24V 5A

TWS-1815  
Wireless  
Sounder

TWD-1850  
Wireless Multi  
Detector

TWS-1815  
Wireless  
Sounder

TWD-1850  
Wireless Multi  
Detector

TWM-1885  
Wireless Addressable  
Coordinator

TWM-1887  
Wireless I/O  
Module

TWM-1886  
Wireless Repeater

TWM-1887  
Wireless I/O  
Module

TWB-1866  
Wireless MCP

TWB-1866  
Wireless MCP

# WIRELESS FIRE ALARM SYSTEMS

**EN54-25 EN54-13**



Teknim wireless devices have been tested and awarded in accordance with EN54-13, the compatibility and integrity assessment of system components.

Teknim Wireless Fire Alarm Systems with TLPWAN Technology can be used in all places such as museums, historical sites, historical churches and mosques, hotels, factories, which require a fire alarm system and where structural wiring is not possible or cable pollution is not desired.

Wireless system basically consists of four main components; Fire alarm control panel, Wireless Coordinator, Wireless Repeater, and wireless end units (Detector, Siren, Button, Input / Output Modules etc.) can be integrated into Teknim Addressable Fire systems and a completely wireless or hybrid structure can be created according to the needs of the project.

In addition, wireless products can work safely and highly compatible with all other brands in conventional systems. Thus, according to the need, you can provide an effective protection with either conventional or addressable wireless fire alarm system.

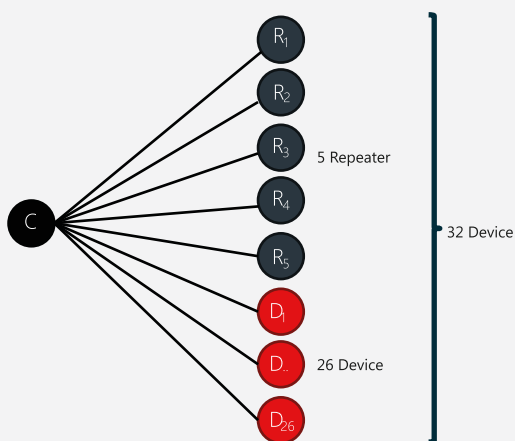
## TLPWAN TECHNOLOGY

The main features of the TLPWAN wireless fire detection system are:

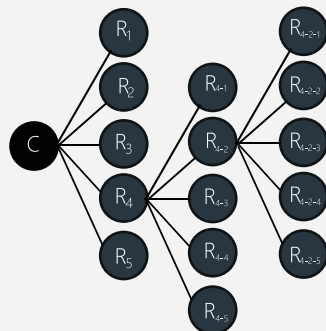
- The system can work with Teknim addressable fire alarm panels or with all other brands of conventional fire alarm panels.
- Supports up to 2500mt communication distance at open space
- Supports up to 31 device per coordinator (26 Device + 5 Repeater)
- Supports tamper warning for all devices
- Supports link test feature for all devices
- Supports firmware update feature for all devices

- Teknim Low Power Wide Area Network
- IEEE 802.15.4 Standard
- Low Power Consumption
- Bidirectional Communication
- AES-128 Encryption Algorithm
- Layer ACK Structure

## TLPWAN NETWORK LIMITS



All devices can be connected to the last layer or distributed in all layers.



Up to 4 repeaters can be connected consecutively to a coordinator.



At least 5 of the devices to be connected to a coordinator are reserved only for repeaters and at most 26 are reserved for other devices.



**Save Up to 90% on Cable and Labor Costs!!**



## EN54-13

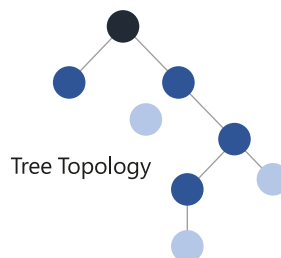
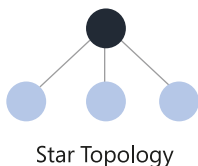
Teknim wireless devices have been tested and awarded in accordance with EN54-13, the compatibility and integrity assessment of system components. EN54-13 certification proves that wireless system components work together in perfect harmony.



**TWM-1885 Wireless Addressable Coordinator can only be used with Teknim brand addressable fire panels, while the TWM-3885 Wireless Conventional Coordinator can be used with all brands and models of conventional fire panels. In this way, you can design a project completely wireless as in addressable or conventional, you can expand a previously installed system with wireless products, or you can create a hybrid structure by designing the project both wired and wireless from the beginning.**

TLPWAN (Teknim Low Power Wide Area Network) is a wireless communication protocol in which devices with low power requirements communicate in a stable and reliable way using 2-way communication in a wide area. Thanks to its advanced addressing mechanism, it enables router devices to join the network easily. This allows the wireless communication area to be expanded easily.

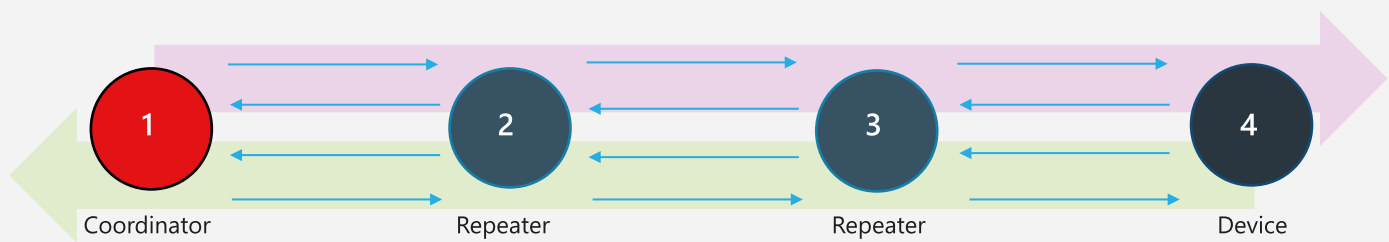
- Coordinator
- Router
- Devices



## ACK MECHANISM

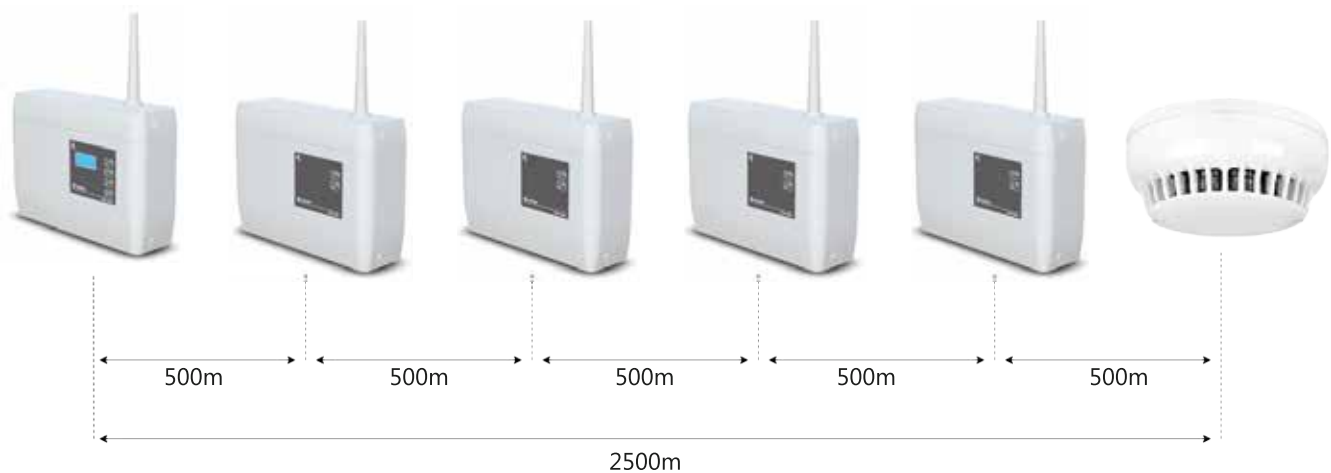
ACK (Acknowledgment) is a control message that checks whether the data is sent or not and starts the resend mechanism if it is not.

TLPWAN uses a 2-layer ACK structure to guarantee the transmission of data.



## SIGNAL STRENGTH AND DISTANCE

- Up to 2500m communication distance at open space



- Up to 2500m communication distance at open space
- Significant decreases in the signal power level may occur in places with high mobility such as parking lots, warehouses, factories, workshops, or in difficult structures such as multi-column and beam, thick walls, or in areas where metal and glass objects are predominant.
- It is not possible to talk about a certain communication distance in inside areas. .

# TWM-1885

Wireless Intelligent Addressable Coordinator



**EN54-25** **EN54-18** **EN54-13**

Teknim TWM-1885 Addressable Coordinator is an interface that enables wireless devices such as detectors, MCPs, I/O Modules and sounders to be operated with Teknim addressable fire alarm panels. Teknim wireless fire alarm systems provide a flexible solution by completely wireless or hybrid structure as well as allowing existing wired structures to be expanded wirelessly especially where wiring infrastructure is not possible.

## GENERAL FEATURES

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with Teknim Addressable Fire Alarm Panels
- Fully Wireless or Hybrid System Design Options
- Easy and Fast Installation, Commissioning and Usage
- Supports 31 Wireless Devices per Coordinator (26 Device and 5 Repeater)

Technical Specifications	TWM-1885
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
Number of Channel	10
Number of Consecutive Repeater Connections	4
Total Number of Single Repeater Connections	5
Total Wireless Device Support	31 (26 Device and 5 Repeater)
Power	From Loop Line
Screen	OLED
Programming	From Control Panel and Onboard Control Buttons
Consumption	10mA
Built-in Isolator	Yes
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm, Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65





**EN54-25 EN54-18 EN54-13**



Teknim TWM-3885 Conventional Coordinator is an interface device that enables wireless devices to be operated with conventional fire alarm panels. The Wireless Conventional Coordinator module, which can work in full compatibility with all brand and model conventional fire panels by using the desired end of line resistor, processes the signals it receives from all wireless devices and enables the warning and notification functions in the control panel.

**GENERAL FEATURES**

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with All Brand Conventional Panels
- Fully Wireless or Hybrid System design Options
- Easy and Fast Installation, Commissioning and Usage
- Support for 31 Wireless Devices per Coordinator (26 Device and 5 Repeater)
- Approx. 500mt Wireless Coverage (Open Area)

Technical Specifications	TWM-3885
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
Number of Channel	10
Number of Consecutive Repeater Connections	4
Total Number of Single Repeater Connections	5
Total Wireless Device Support	31 (26 Device and 5 Repeater)
Power	18 - 35VDC (External)
Screen	OLED
Zone Resistor	Determined According to the Conventional Panel
Sounder Monitoring Input	1
Programming	Onboard Control Buttons
Consumption	10mA
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65



**EN54-25 EN54-18 EN54-13**



TWM-1886 Wireless Repeater allows the wireless network area to be expanded by connecting to the coordinator or another repeater. It is mainly used to increase the communication distance between the wireless coordinator and wireless devices.

It is suitable for use with both TWM-1885 Wireless Addressable Coordinator and the TWM-3885 Wireless Conventional Coordinator.

**GENERAL FEATURES**

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with TWM-1885 and TWM-3885 Coordinators
- External Power 18-35 VDC
- Easy and Fast Installation, Commissioning and Usage
- Approx. 500mt Wireless Coverage (Open Area)

Technical Specifications	TWM-1886
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
RF Power	14 dBm (25 mW)
Number of Channel	10
Number of Consecutive Router Connections	4
Total Number of Single Router Connections	5
Coverage	Up To 500mt (Open Space)
Programming	Onboard Control Buttons
Consumption	10mA
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65



# TWD-1850

Wireless Multi Detector (Smoke and Heat)



**EN54-25 EN54-5 EN54-7 EN54-13**

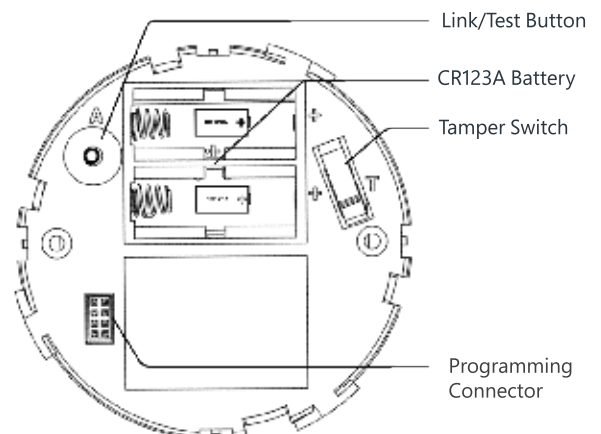
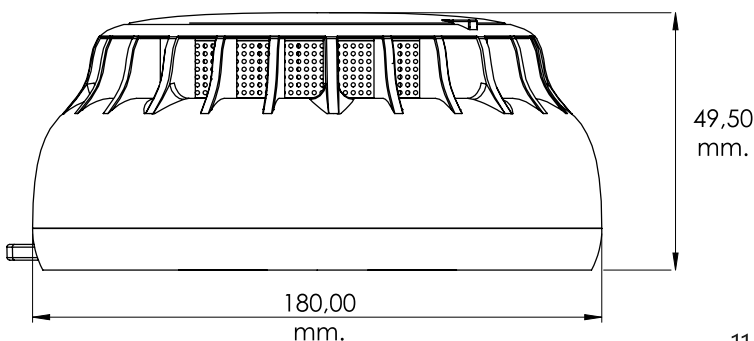
TWD-1850 Wireless Multi Detector offers excellent wireless solutions with wide coverage and long-term battery life, especially in places where wiring is costly or impossible.

The wireless multi detector offers different types of detection options in a single detector. In this way, the confusion caused using detectors with different product codes in projects is prevented, and different types of detection needs are provided with software settings to be made in a single detector.

## GENERAL FEATURES

- EN54-5, EN54-7 and EN 54-25 Certified
- Up To 500mt Wireless Coverage (Open Area)
- Up To 8 Years Battery Lifetime with Two CR123A Battery
- Different Type of Detection in a Single Detector;
  - Only Optical Smoke
  - Only Fixed Heat
  - Only Heat Rise
  - Smoke and Fixed Heat
  - Smoke or Fixed Heat
  - Smoke and Heat Rise
  - Smoke or Heat Rise
- Special software algorithms to eliminate false alarms
- Easy to Clean Smoke Chamber

Technical Specifications	TWD-1850
Standard	EN54-5, EN54-7, and EN54-25
Operating Frequency	868 mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	Up To 500mt (Open Space)
Battery	Up To 8 Years With 2X CR123A Battery
Consumption	25uA
Detection Types	Smoke Fixed Heat Heat Rise Smoke and Fixed Heat Smoke or Fixed Heat Smoke and Heat Rise Smoke or Heat Rise
Smoke Detection Level	H:0,12 – m:0,15 – l:0,18 dB/m
Heat Detection	A2S, A2R
Operating Temperature	-10°C ~ 70°C
Dimensions (mm)	Ø109,6- h48,1
Weight (With and Without Base)	183 gr / 125 gr
Humidity	95% RH
Protection Class	IP30







**EN54-25 EN54-11 EN54-13**

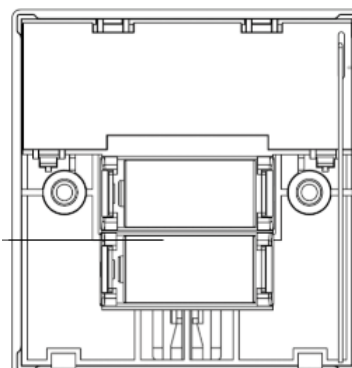
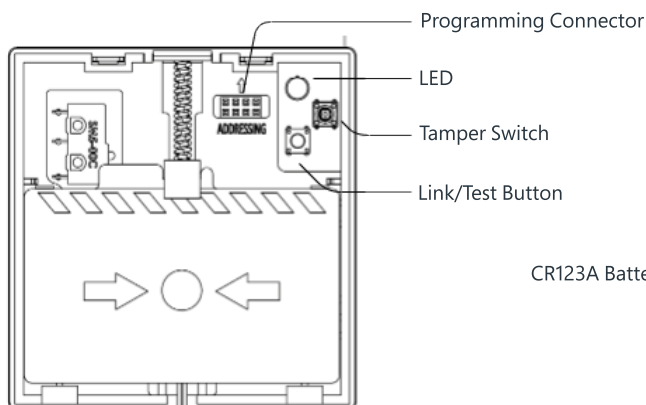
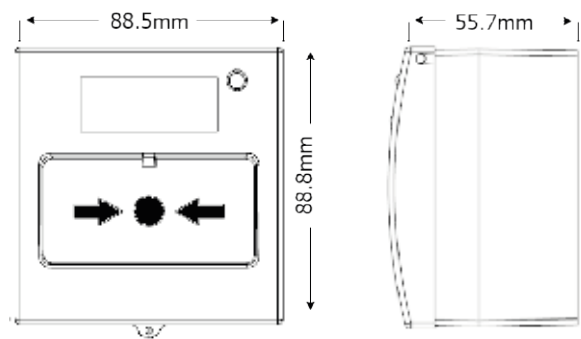
TWB-1866 is a wireless manual call point used to create manual warning in case of fire. It communicates completely wirelessly with the control panel.

TWB-1866 can operate 4 years with single battery or 8 years with two battery. It supports resettable type of operation and additional protection cover can be implemented to avoid situations that may cause false alarms.

**GENERAL FEATURES**

- EN54-11 and EN 54-25 Certified
- Up To Approx. 500mt Wireless Coverage (Open Area)
- Up To 8 Years Battery Lifetime with Two CR123A Battery
- Resettable Type of Operation
- Optional Protection Cover
- Flush or Surface Mounting Option

Technical Specifications	TWB-1866
Standard	EN54-11 and EN54-25
Operating Frequency	868mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	Up To 500mt (Open Space)
Battery	Up To 8 Years With 2X CR123A Battery
Average Consumption	25µA
Operation Type	Resettable
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	86x55x88 mm
Humidity	95% RH
Protection Class	IP30



**EN54-25 EN54-18 EN54-13**



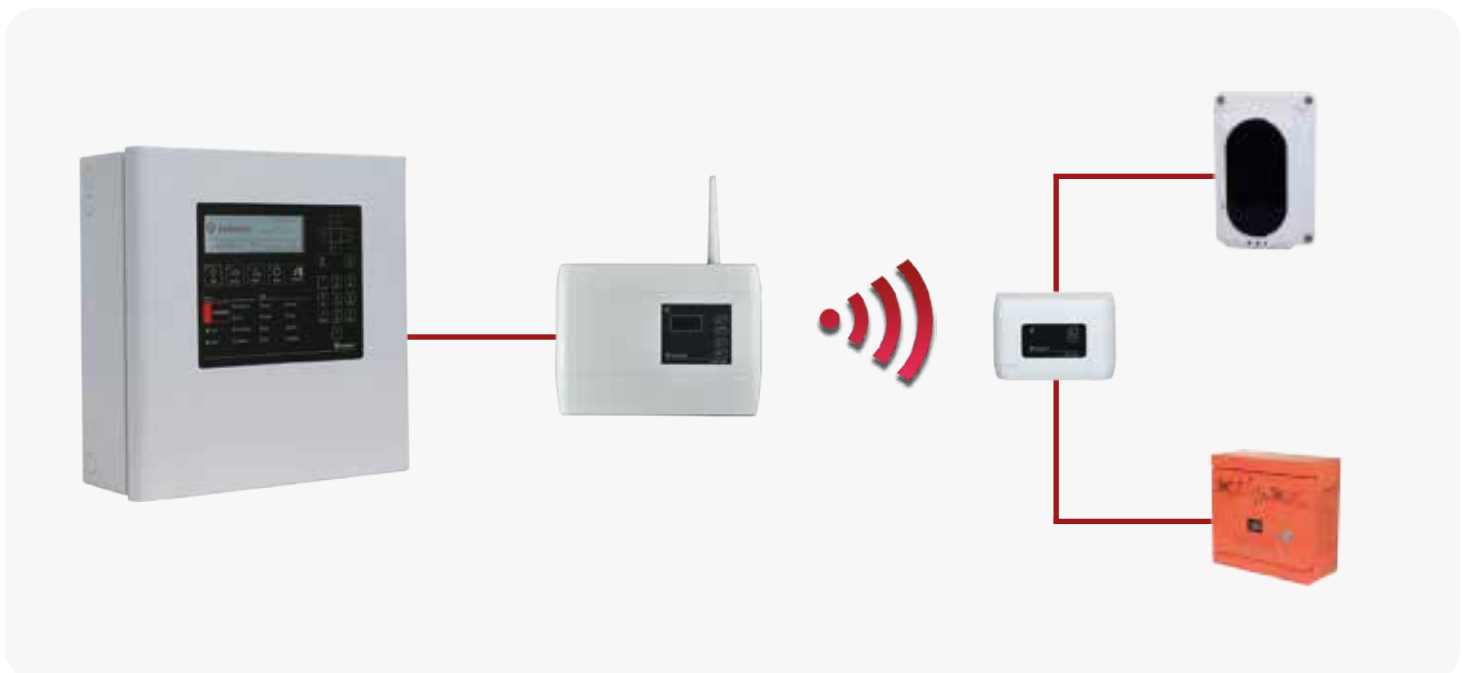
TWM-1887 Wireless input / output module is used to connect 3rd party wired products to the control panel wirelessly or to control a 3rd party device wirelessly. Input terminal is monitored for connection errors. Input and output can be programmed to be used in any scenario through the panel.

**GENERAL FEATURES**

- EN 54-18 and EN 54-25 Certified
- Up To 500mt Wireless Coverage (Open Area)
- Up To 8 Years Battery Lifetime with Two CR123A Battery



Technical Specifications	TWM-1887
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	Up To 500mt (Open Space)
Battery	Up To 8 Years With 2X CR123A Battery
Operation	1x Monitored Input 1x Output
Operating Temperature	-10°C ~ 55°C
Consumption	15uA (@3V)
Dimensions (mm)	100x66x33.5 mm
Humidity	95% RH
Protection Class	IP30



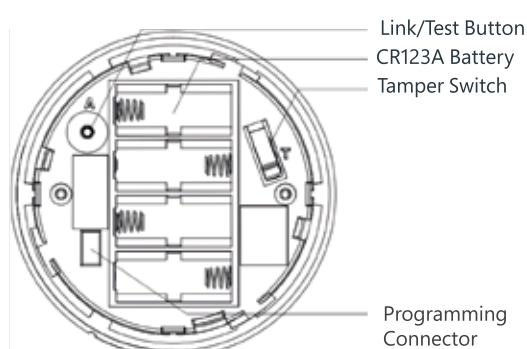
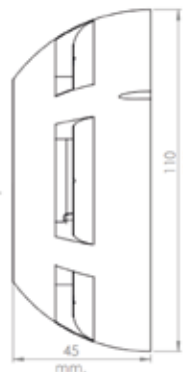


TWS-1815 works as sounder, flasher or both options at the same time according to project needs. It operates with 4pcs CR123A battery and communicates completely wirelessly with the control panel.

It has two different color options, white and red. Supports 3 different sound level along with 3 different flasher mode.

### GENERAL FEATURES

- Comply with EN54-3 and EN54-25
- Up To 500mt Wireless Coverage (Open Area)
- Up To 6 Years Battery Lifetime with 4X CR123A Battery
- Only Sounder, Only Flasher or Both Options can be Operated
- 3 Different Sound Level
- 3 Different Flasher Mode (Slow, Normal, Fast)



Technical Specifications	TWS-1815
Standard	Comply with EN54-3 and EN54-25
Operating Frequency	868Mhz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	Up To 500mt (Open Space)
Battery	Up To 6 Years With 4X CR123A Battery
Average Consumption	20µA (@12V)
Sound Level	88,4dB / 90,3dB / 95dB ±2 (@12VDC, 1mt.)
Flasher Coverage	W-2,4-4
Sounder Mode	3 Modes (Low-Mid-High)
Sounder Tone Options	42 Different Tone
Flasher Mode	3 Modes (Slow-Normal-Fast)
Operating Temperature	-10°C ~ 55°C
Color and Body Material	RED / White - UL94 non-flammability Polycarbonate
Dimensions (mm)	Ø:110mm, h:55mm (Includes Base)
Wight	190gr. (Without Battery)
Humidity	95% RH
Protection Class	IP21C



# INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM

**EN54-13**



Teknim addressable fire alarm devices have been tested and awarded in accordance with EN54-13, the compatibility and integrity assessment of system components.

## TFP-12XX

1-2-4 Loop Intelligent Addressable Fire Alarm Panel



**teknim**<sup>®</sup>



**EN54-2 EN54-4 EN54-13**

TFP-12XX series Intelligent Addressable Fire Alarm Panels use unique FLASHLINK protocol for loop communication which was created by Teknim engineers. Supports 1-2 Loop (240 Device per Loop) and 4 Loop (127 Device per Loop) and supports network up to 16 control panels. It offers stable and reliable solutions for working in harsh environments with the metallic case.

TFP-12XX also supports built-in LAN network connection which allows local or remote configuration / monitoring by Teknim TFY-100 configuration software and Mosaic monitoring software. In addition, panel can be remotely monitored and configured by Teknim Cloud Based Mobile Application.

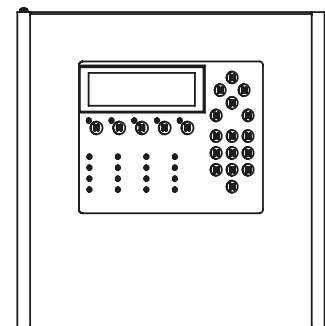
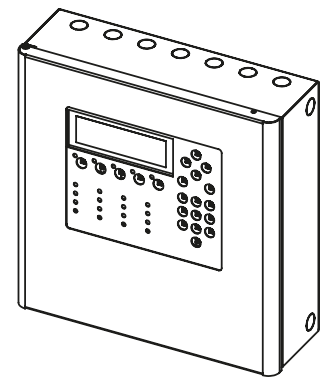
TFP-12XX comes with an LCD graphic display onboard to easily understand the error and alarm warnings and to make all the settings of the device.

TFP-12XX Fire Alarm Panels are designed in accordance with European Standards which supports EN54-2 and EN54-4 Certificates.

Teknim addressable fire alarm devices have been tested and awarded in accordance with EN54-13, the compatibility and integrity assessment of system components.

### GENERAL FEATURES

- EN 54-2 and EN 54-4 Certified
- Technician and user friendly; easy to install, programming and operation
- Supports 1-2-4 Loop Capacity
- Supports up to 72 Zone
- Cable distance up to 2,5 Km per loop
- Network up to 16 Control panels via RS-485 by TFC-1209 Network Module
- Easy to read, 240\*64 wide LCD graphic display and user-friendly interface
- Display customizes with company logo, contact information, images, etc.
- Same level of accessibility and command sending to all panels via peer-to-peer communication network
- Supports uninterrupted and reliable loop communication by FlashLink communication protocol
- Advanced panel programming and user-friendly system configuration via TFY-1000 software
- Supports 12,000 events of alarms, errors, and warnings
- Supports 2x independent and monitored siren output.
- Detailed voltage/current information of the panel and loop on the LCD display
- Night/Day operation mode
- Multiple language support
- Supports mobile application



### PANEL MODELS

- TFP-1211 – 1 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL
- TFP-1212 – 2 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL
- TFP-1214 – 4 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL
- TFP-1211R – 1 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL, RED
- TFP-1212R – 2 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL, RED
- TFP-1214R – 4 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL, RED

# TFP-12XX

## 1-2-4 Loop Intelligent Addressable Fire Alarm Panel Technical Specification



**teknim**<sup>®</sup>

General	TFP-1211	TFP-1212	TFP-1214
Standard		EN54-2/4	
Ethernet (TCP/IP)		Yes	
Multi Language Support		Yes	
Display		240x64 LCD Screen	
Programming		Through Control Panel or Via TFY-1000 Configuration Software	
<b>Loop Information</b>			
Standart Çevrim Sayısı	1	2	4
Number of Devices Supports Per Loop	240	240	127
Total Device Support	240	480	508
Number of Zones		72	
Cable Distance		J-Y(St)Y...Lg 1000mt @ 0,8mm (@250 mA) 2000 mt @ 0,8mm (@75 mA) 2000 mt @ 1,5mm (@250 mA) 2500 mt @ 2mm (@250 mA)	
<b>Network</b>			
Protocol		TdNET (RS-485)	
Max. Panel Network		16 (TFC-1209 Network Card Needed)	
<b>Mechanical</b>			
Dimensions (mm)		385 x 380 x 130 mm	
Body Material and Color Options		Metal Light Grey – TFP-1211 Red – TFP-1211R	
Weight		6,5Kg (Without Battery)	
<b>Environmental</b>			
Operating Temperature		-10°C ~ 55°C	
Humidity		95% RH	
Protection Class		IP30	
<b>Power</b>			
Power		230 / 110 VAC (+%10 / -%15)	
Frequency		50 / 60 Hz (±%5)	
Fuse		6A	
Battery		2 x 12V, 7Ah 2 x 12V, 12Ah	
Imin		130 mA	
ImaxA		1A	
ImaxB		1,5A	
<b>Outputs</b>			
Monitored Sounder Output		2	
Sounder Output		500 mA	
Sounder EOL		4K7Ω	
General Fault Relay		1X NC/NO, 30V – 2Ah	
Alarm Relay		1X NC/NO, 30V – 2Ah	
AUX		1X 24VDC – 500mA	

## TFP-211X

1-2-4 Loop Intelligent Addressable  
Fire Alarm Panel  
With Zone Indicator

## TFP-213X

1-2-4 Loop Intelligent Addressable  
Fire Alarm Panel With Zone Indicator  
Built-in Printer



**EN54-2 EN54-4**

TFP-21XX series Intelligent Addressable Fire Alarm Panels are uses unique FLASHLINK protocol for loop communication which created by Teknim engineers. Supports 1-2 Loop (240 Device per Loop) and 4 Loop (127 Device per Loop) and supports network up to 16 control panels. It offers stable and reliable solutions for working in harsh environments with the metallic case.

TFP-21XX also supports built-in LAN network connection which allows local or remote configuration / monitoring by Teknim TFY-100 configuration software and Mosaic monitoring software. In addition, panel can be remotely monitor and configure by Teknim Cloud Based Mobile Application.

TFP-21XX comes with an LCD graphic display onboard to easily understand the error and alarm warnings and to make all the settings of the device. Panel supports 72 zones LED indicator to indicate alarms, faults, disabled zones and test conditions.

TFP-213X supports built-in thermal printer for log prints with time stamp.

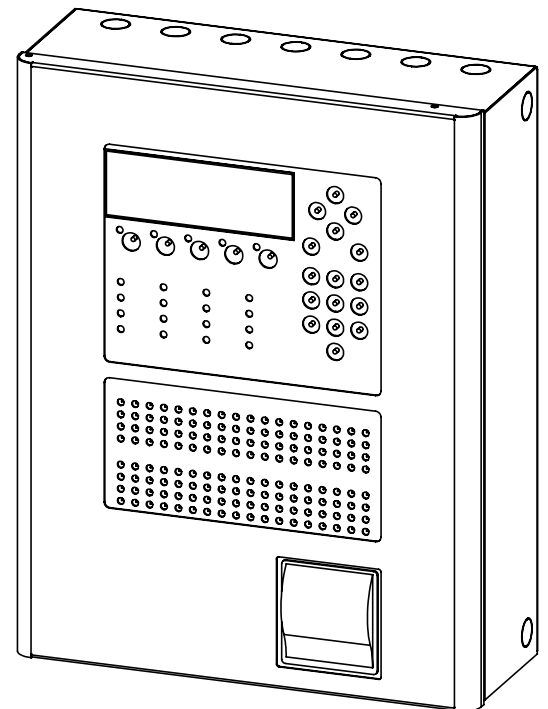
TFP-21XX Fire Alarm Panels are designed in accordance with European Standards which supports EN54-2 and EN54-4 Certificates.

## GENERAL SPECIFICATIONS

- EN 54-2 and EN 54-4 Certified
- Supports 72 Zones LED indicators for Fire and Faults
- Supports Built-in Thermal Printer (TFP-213X Models)
- Technician and user friendly; easy to install, programming and operation
- Supports 1-2-4 Loop
- Supports up to 72 Zone
- Cable distance up to 2,5 Km per loop
- Network up to 16 Control panels via RS-485 by TFC-1209 Network Module
- Easy to read, 240\*64 wide LCD graphic display and user-friendly interface
- Display customizes with company logo, contact information, images, etc.
- Same level of accessibility and command sending to all panels via peer-to-peer communication network
- Supports uninterrupted and reliable loop communication by unique FlashLink communication protocol
- Advanced panel programming and user-friendly system configuration via TFY-1000 software
- Supports 12.000 events of alarms, errors, and warnings
- Supports 4x independent and monitored siren output.
- Detailed voltage/current information of the panel and loop on the LCD display
- Night/Day operation mode
- Multiple language support
- Supports Mobile Application

## PANEL MODELS

TFP-2111 - 1 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR  
TFP-2112 - 2 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR  
TFP-2114 - 4 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR  
TFP-2131 - 1 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR, BUILT-IN PRINTER  
TFP-2132 - 2 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR, BUILT-IN PRINTER  
TFP-2134 - 4 LOOP INTELLIGENT ADDRESSABLE FIRE ALARM PANEL WITH ZONE INDICATOR, BUILT-IN PRINTER



## TFP-211X

1-2-4 Loop Intelligent Addressable  
Fire Alarm Panel  
With Zone Indicator

## TFP-213X

1-2-4 Loop Intelligent Addressable  
Fire Alarm Panel With Zone Indicator  
Built-in Printer



General	TFP-2111	TFP-2112	TFP-2114	TFP-2131	TFP-2132	TFP-2134
Standard	EN54-2, EN54-4					
Ethernet (TCP/IP)	Yes (Onboard)					
Multi Language Support	Yes					
Display	240x64 LCD Screen					
Zone Indicator	72 Zone LED Indicator					
Printer	-	-	-	Thermal Printer	Thermal Printer	Thermal Printer
<b>Loop Information</b>						
Standart Çevrim Sayısı	1	2	4	1	2	4
Number of Devices Supports Per Loop	240	240	127	240	240	127
Total Device Support	240	480	508	240	480	508
Number of Zones	72					
Cable Distance	J-Y(St)Y...Lg 1000mt @ 0,8mm (@250 mA) 2000 mt @ 0,8mm (@75 mA) 2000 mt @ 1,5mm (@250 mA) 2500 mt @ 2mm (@250 mA)					
<b>Network</b>						
Protocol	TdNET (RS-485)					
Max. Panel Network	16 (TFC-1209 Network Card Needed)					
<b>Mechanical</b>						
Dimensions (mm)	485 x 387 x 145 mm					
Body Material and Color Options	Metal Light Grey – TFP-21XX Red – TFP-21XXR					
Weight	8,4Kg (W/O Bat.)	8,4Kg (W/O Bat.)	8,4Kg (W/O Bat.)	9,95Kg (W/O Bat.)	9,95Kg (W/O Bat.)	9,95Kg (W/O Bat.)
<b>Environmental</b>						
Operating Temperature	-10°C ~ 55°C					
Humidity	95% RH					
Protection Class	IP30					
<b>Power</b>						
Power	230 / 110 VAC (+%10 / -%15)					
Frequency	50 / 60 Hz (±%5)					
Fuse	6A					
Battery	2 x 12V, 7Ah 2 x 12V, 12Ah					
Imin	130 mA	180 mA	280 mA	130 mA	180 mA	280 mA
I <sub>maxA</sub>	1A					
I <sub>maxB</sub>	1,5A					
<b>Outputs</b>						
Monitored Sounder Output	4X 24VDC					
Sounder Output	500 mA					
Sounder EOL	4K7Ω					
General Fault Relay	1X NC/NO, 30V – 2Ah					
Alarm Relay	1X NC/NO, 30V – 2Ah					
AUX	1X 24VDC – 500mA					
Programmable Aux (PAUX)	1X 24VDC – 500mA					
Programmable Relay (PRelay)	1X NO/NC Dry Contact 30V, 2A					



# TFP-1240

Intelligent Addressable Repeater

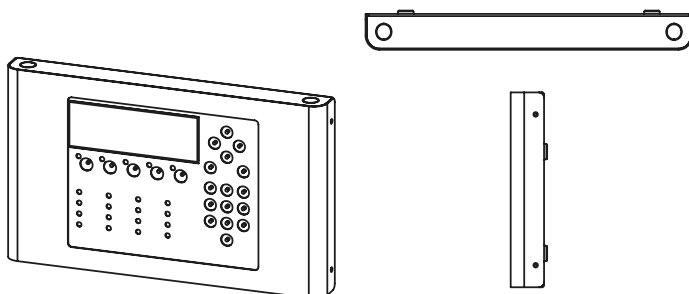
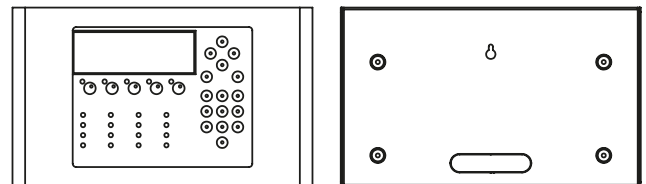


Teknim TFP-1240 repeater panel is developed to monitor and intervene fire detection systems from different points at large and medium scale enterprises. It can be connected approximately up to 1.000 mt distance from main panel via RS-485 communication layer.

Slim and aesthetic design fits into any office environment, guard kiosk, reception desk etc. Power is supplied directly from the panel without an external power supply. All features provided on the main panel are also available on the repeater panel. All 72 zones on the loop are displayed on LCD screen of TFP-1240 repeater pane

## GENERAL FEATURES

- Easy to read, 240x64 wide LCD Display
- User-friendly interface enables easy monitoring of alarms, errors, and warnings
- Real-time, stabilized communication via RS-485 communication structure
- Up to 1 Km cable distance with main panel
- Robust metallic body, stylish design



Technical Specifications	TFP-1240
Main Supply Voltage	24±4 VDC
Maximum Consumption	0,15A @24 VDC
Cable Type and Distance	J-Y (ST) Y-L9 1000 mt 0,8 mm
<b>Mechanical</b>	
Dimensions (mm)	230 x 386 x 40 mm
Weight	2,6Kg
Body material and color	Metal Light Grey – TFP-1240 Red – TFP-1240R
<b>Environmental</b>	
Operating Temperature	-10C ~ 55C
Humidity	95% RH
Protection Class	IP30

# TFC-1209

Network Module with Built-in Isolator



TFC-1209 Network Module establishes a strong ring or bus network by inter-connecting 16 panels via TdNET protocol. It also supports built-in isolator which helps to protect the network line in case if there will be a short cut at the cable between control panels.

In case system load needs to be distributed or in facilities with multiple buildings, it can inter-connect all panels to build a ring or bus network and enable operation and control of the entire system as a single panel.

## GENERAL FEATURES

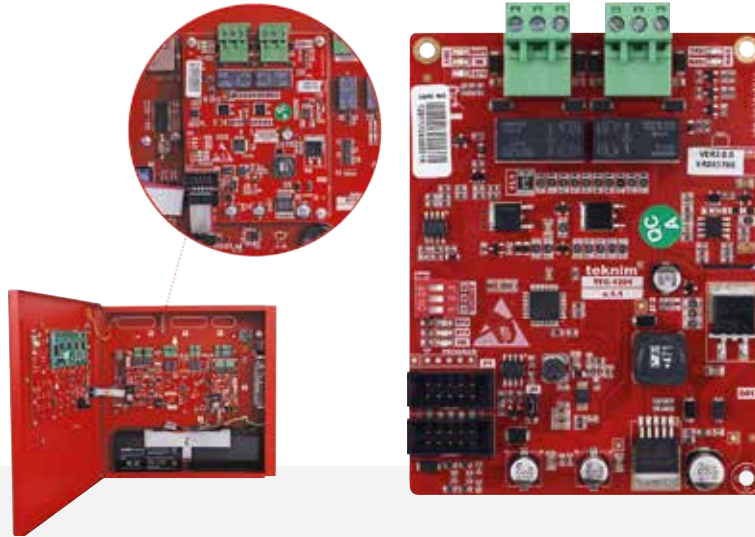
- Supports Class A and Class B connections
- Supports Built-in Isolator
- Ensures a reliable and logic data transmission via Ring and Bus topologies.
- Uses RS485 serial communication and data transmission speed is 230.400bps
- Same level of accessibility and command sending to all panels via peer-to-peer communication network
- Uses TdNET protocol developed by Teknim
- In case of network board failure, it by-passes board input and output connections and ensures network line continuity
- Network connection up to 16 panels
- Enables monitoring of all networked panels from any panel in the system
- Provides visual notification via error LEDs indicating open circuit direction or link LED indicating connection status.
- It can be easily plugged to main board by connector and frame connection and operated

## TdNET® NETWORK COMMUNICATION PROTOCOL

TdNET is a strong and reliable communication protocol developed to build a network among all products of Teknim. TdNET protocol defines Network and Data Link layers according to OSI (Open Systems Interconnection) defined by International Standard Organization.

TdNET Protocol takes advantage of RS-485's differential feature and performs CRC control in order to prevent faulty data transmission. Thus, data transmission is both reliable and capable of eliminating disturbances and high frequency effects that may interrupt communication

Technical Specifications	TFC-1209
Protocol	TdNET (RS-485)
Maximum Cable Distance	1.000 mt
Maximum Control Panel Connection	16
Built-in Isolator	Yes
Average Consumption	50mA (@24V)
Dimensions (mm)	61 x 110 mm
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH



TFC-1201 Loop board communicates with addressable devices over loop line using FlashLink protocol. It has a control capacity of 240 end units.

TFC-1201 supports Class A and Class B connections. This enables ease of installation and operation. (Be aware that if more than 32 end units are used in Class B connection structure, system will not be covered EN54-2 standard)

It is used increasing loop quantities to 2 loops of TFP-1211 Control Panel.

### GENERAL FEATURES

- Supports FlashLink protocol
- 240 device capacity
- Internal short-circuit protection
- Class A and Class B connection support
- Switch structure for loop board addressing
- Configuration from the control panel or PC software

### Technical Specifications

### TFC-1201

Power	18V(min) – 30V(max)
Average Consumption	65mA (@24V)
Loop Protocol	Flashlink
Supported Device	240
Loop Power	32V
Loop Current	250mA
Humidity	95% RH
Operating Temperature	-10°C ~ 55°C (14°F ~ 131°F)
Dimensions (mm)	84mm x 110mm

### FlashLink® DATA COMMUNICATION PROTOCOL

FlashLink is an uninterrupted and reliable communication protocol developed by Teknim which is used data communication between loop board and devices over power line. Protocol supports multiple frame structures. This enables flexible and fast transmission of data.

Fast data speed enables a quick scanning time. Emergency package feature enables detection of fire in less than 1,5 seconds.



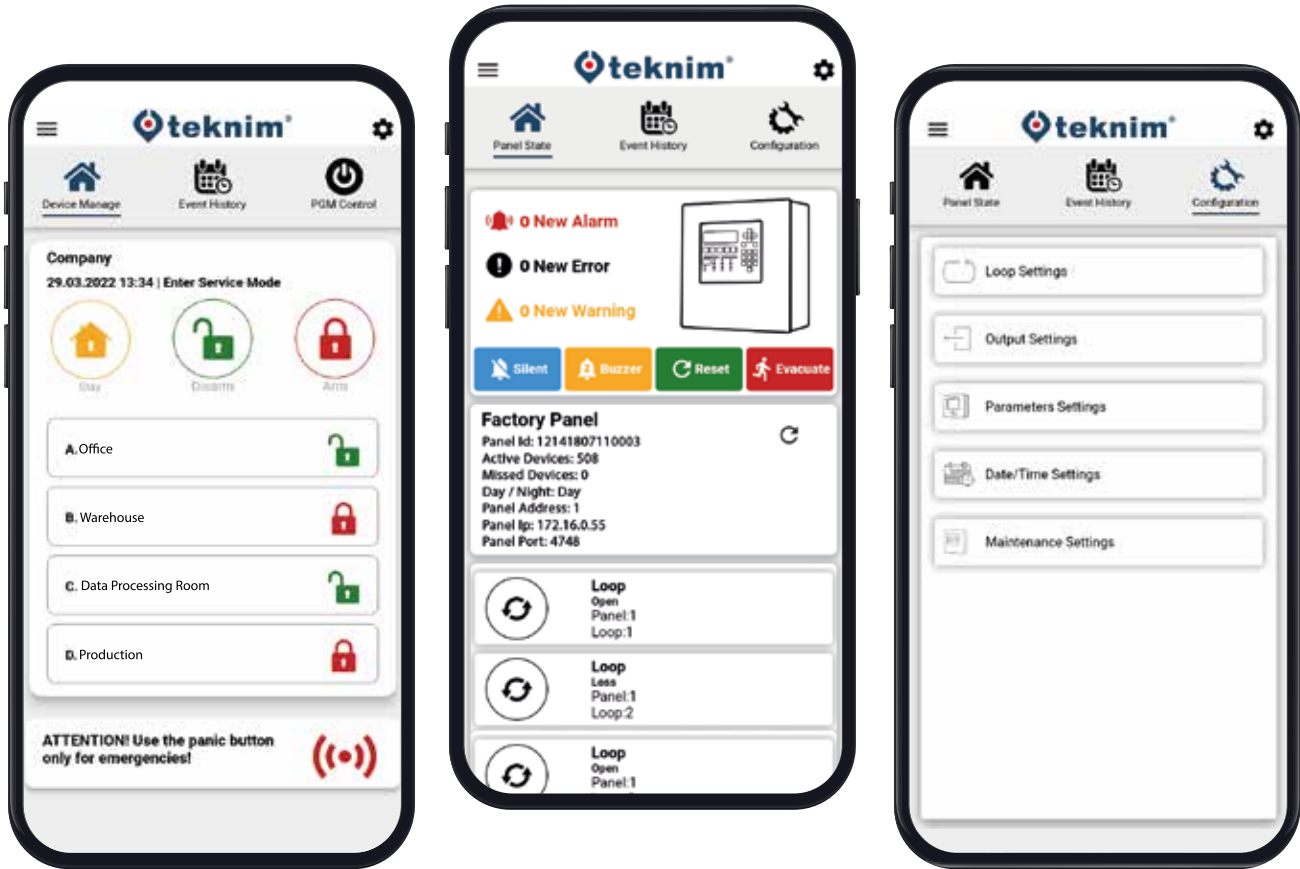
TFCM-1801 device programming module is developed to define address for addressable devices such as detectors, mcp, input-output modules or to read defined address and firmware version of the devices. It is supplied from 9V (6LR61) battery.

Practical menu interface and controls enable ease of use.

## GENERAL FEATURES

- It can be connected to all Teknim addressable devices regardless direction of connector
- Enables fast-easy programming
- Saves the last address in memory by "Memorize" feature and prevents double address errors
- Auto Off feature switches the device to standby mode when not in use
- It is used to write/read address, change existing addresses, read versions, read serial numbers and production dates.

Technical Specifications	TFCM-1801
Power	9V (6LR61)
Weight	140g (Battery Included)
Dimensions (mm)	70mmx135mm
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30



Teknim cloud-based mobile application offers a perfect solution for remote control and monitoring of Teknim addressable fire panels through mobile application. Thanks to the built-in TCP-IP port, Teknim addressable panels can be connected to the cloud without any additional cost, only by providing the internet.

For cloud connection of your fire panel, it is sufficient to create a cloud user through the mobile application and match your panel with your account by scanning the QR code on the panel.

By adding your fire panel to the mobile application, you can easily perform the following operations.

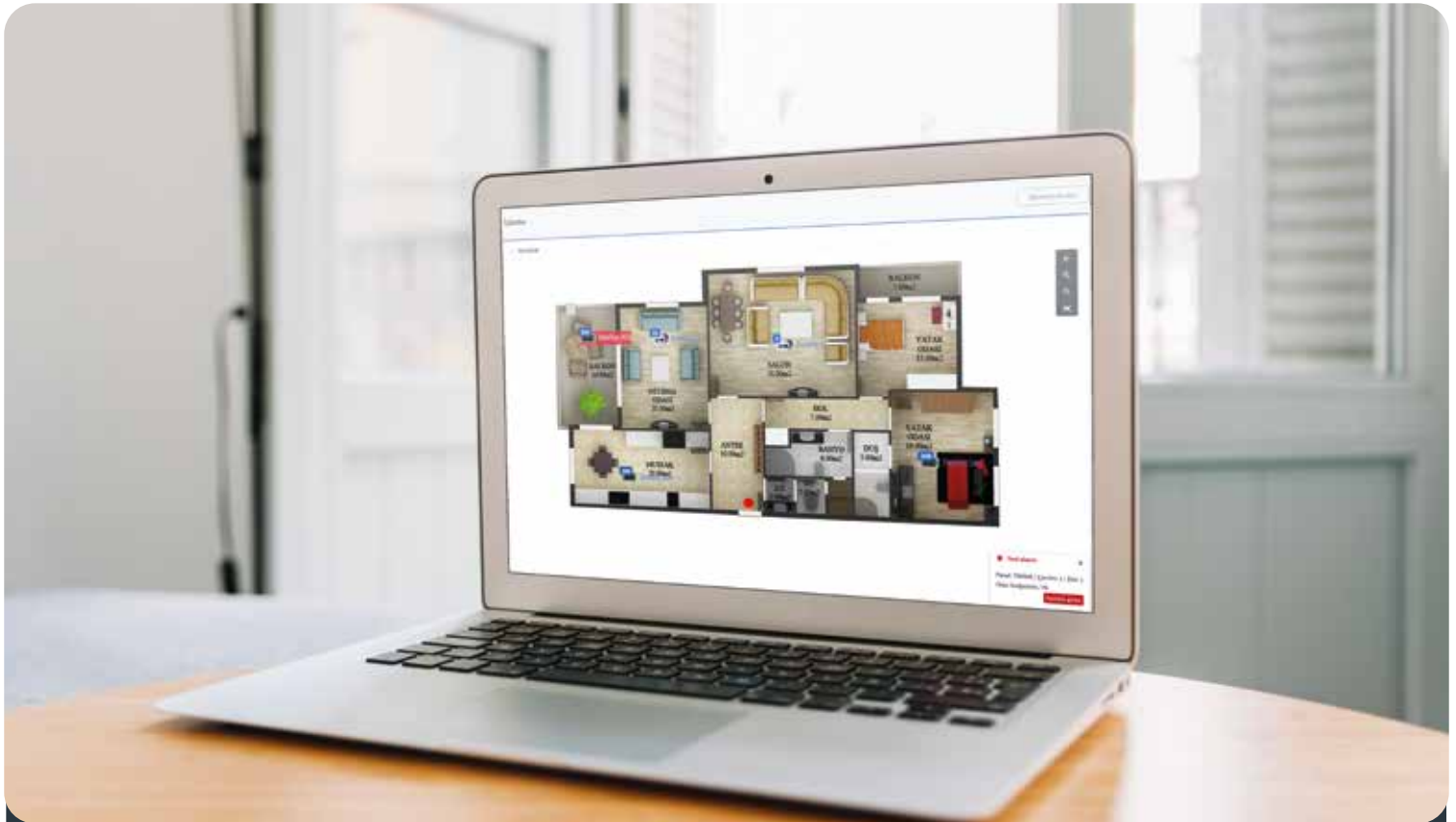
## GENERAL FEATURES

- Getting online status of the panel
- Sending Buzzer, Reset, Silence, Evacuate commands to Control panel
- Accessing all Event List with filter options
- Receive desired event notifications
- Sharing your panel with other cloud users
- Dark Mode / Light Mode Options
- A certain level of configuration options for installers
  - Loop Settings
  - Output Settings
  - Parameter Settings
  - Date/Time Settings
  - Maintenance Settings

Teknim Mobile application can be downloaded free of charge from the App Store and Android Market.





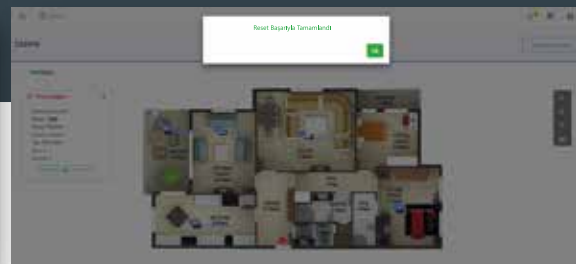
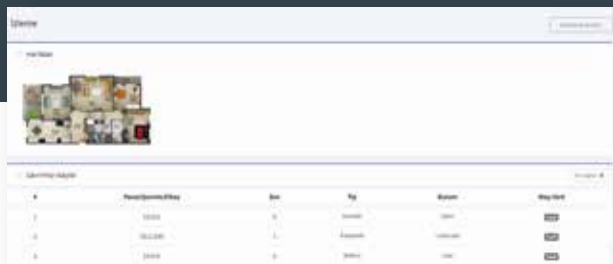


Mosaic-2000 is a web based graphical monitoring software for Teknim addressable fire alarm system. It supports adding multiple maps for projects and providing adding all devices on maps according to project needs.

It has easy to use interface and supports pop-up visual and sound warnings during alarms and warnings. It also supports to send commands to control panels such as reset, silence, or evacuate.

## GENERAL FEATURES

- Supports up to 16 Control Panel at the same time
- Graphic interface
- POP-UP alarm information
- Supports API Integration for 3rd party software
- Transition between maps in case of multiple fire alarms and graphical viewing of event location
- Remote command sending for silence, evacuation, reset
- Multiple map support (.png, .bmp and .jpeg)
- Display/save unlimited number of event logs by filtering (pdf)
- Multi-language support



## TFY-1000

Teknim Addressable Fire Alarm Configuration Software

## ARC CONNECTION

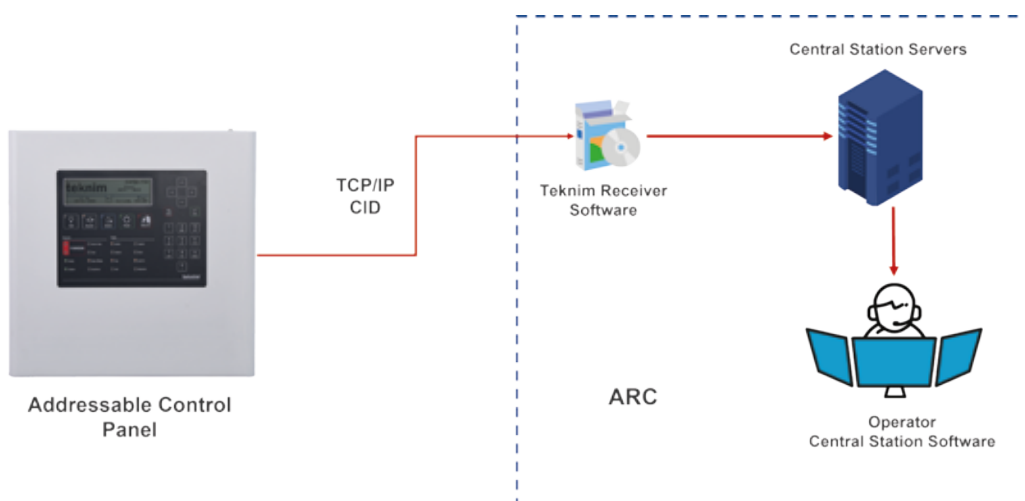
Teknim Addressable Fire Alarm Panel ARC Connection



TFY-1000 is a configuration software for all Teknim addressable control panels. It has simple interface structure and drag-drop feature makes the software easy to use. It saves installers from significant time losses during configuration. In addition to the functional features on the control panel, the software has additional features of creating scenario, logo upload and back-up of event history. Communication between TFP-12XX panel and software is provided by TCP/IP protocol. All Teknim addressable fire alarm panels support onboard ethernet interface.

### GENERAL FEATURES

- Offline project design
- Project saving and editing
- Add-remove devices to/from the system (drag-drop feature)
- TCP/IP communication
- Scenario creation (drag-drop feature)
- Event log view and back-up (PDF Export)
- Network support (max. 16 panels)
- Single panel or entire network system configuration
- Company/Installer Contact information and logo upload
- Help Window with detailed explanation in each section
- Multi-language support



Teknim addressable fire alarm panels can be integrated with alarm receiving centers over the internet and can transmit all alarm, fault and warning information.

Thanks to the built-in TCP/IP port in the panel, it is possible to connect to all ARCs by simply providing an internet connection to the panel without any additional cost.

## TFD-1251

Intelligent Addressable Smoke Detector with Built-in Isolator

## TFD-1250

Intelligent Addressable Smoke Detector



**EN54-7 EN54-17 EN54-13**

TFD-1251 and TFD-1250 Detectors are designed to be connected two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate Teknim Addressable control panels. Detector supports optical sensing technology by using a unique smoke chamber perfected by Teknim, through long term fluid mechanics and optic refraction tests.

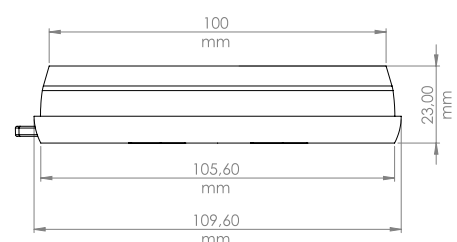
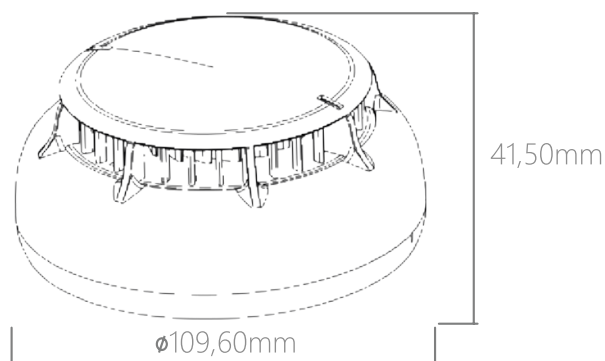
It has a series of algorithms to minimize faulty detections and provide pollution warning. Sensitivity levels are adjustable through control panel or configuration software. Smoke chamber can be easily removed for cleaning in case of possible pollutions in excessively dusty environments.

Detector supports built-in isolator version (TFD-1251) to protect the loop line from short-circuit.

### GENERAL FEATURES

- EN54-7 and EN54-17 Certified
- Detects smoke particles in the environment via light scatter principle
- Supports built-in Isolator (TFD-1251)
- Supports 2x LED indicators enables 360° view
- Supports Three different colors of indication by LEDs to individually display Status, Fire Alarm, Short-Circuit and Pollution (Blink Blue/Red/Fixed Blue/Yellow)
- 3 Different detection sensitivities adjustable from the control panel and configuration software (High, Medium, Low)
- Special software algorithms to eliminate sudden dust, smoke, etc. which may cause faulty alarms
- Adaptive protection preventing faulty alarms by sampling the environment continuously
- Advanced pollution algorithm that continuously measures pollution level and warns the user from detector and panel
- Supports remote indicator connection terminals
- Easy to clean smoke chamber
- Aesthetic and elegant design fits any environment
- Optional Label apparatus can be installed to the bottom of detector base view detector address from distance

Technical Specifications	TFD-1251	TFD-1250
Standard	EN 54-17 / EN54-7	EN54-7
Operating Type	Optical Sensing	
Built-in Isolator	Yes	No
Detection Level	H:0,12 – m:0,15 – l:0,18 dB/m	
Power	18-32VDC	
Average Consumption	80µA@32V	
Alarm Consumption	3mA	
Indicator Current	10mA (2K2 Resistor)	
Starting Time	15sec	
Weight (Include Base / Not)	183gr / 125gr	
Dimensions (mm)	Ø110, h42	
Body Material and Color	ABS Plastic – White	
Alarm Indicator LED	RED	
Status LED	Blue	
Isolator LED	Yellow	No
Operating Temperature	-10°C ~ 55°C	
Humidity	95% RH	
Protection Class	IP30	



## TFD-1261

Intelligent Addressable Heat Detector (Fixed Heat and Heat Rise) with Built-in Isolator

## TFD-1260

Intelligent Addressable Heat Detector (Fixed Heat and Heat Rise)



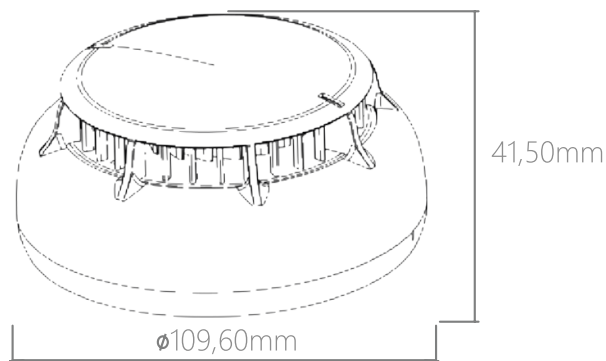
**EN54-5 EN54-17 EN54-13**

TFD-1261 and TFD-1260 Detectors uses heat detection technologies to sense fire and it can be connected two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate Teknim Addressable control panels. It has a series of algorithms to minimize faulty detections.

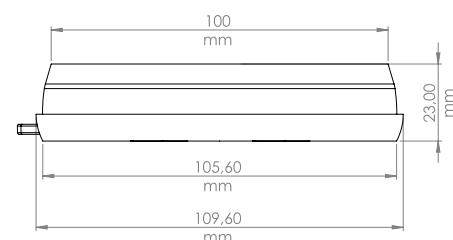
Detector can work as Fixed Heat or Heat Rise which can be selected from control panel or configuration software and complies with EN54-5 and EN54-17.

### GENERAL FEATURES

- EN54-5 and EN54-17 Certified
- Supports 2X NTC to ensure more accurate and precise temperature measurement
- Supports Built-in Isolator (TFD-1261)
- Supports A2S or A2R Detection
- Supports 2x LED indicators enabling 360° view
- Supports three different colors of indication by LEDs to individually display Status, Fire Alarm, Short-Circuit and Pollution (Blink Blue/Red/Fixed Blue/Yellow)
- Supports remote indicator connection terminals
- Aesthetic and elegant design fits any environment
- Optional Label apparatus can be installed to the bottom of detector base view detector address from distance



Technical Specifications	TFD-1261	TFD-1260
Standard	EN 54-17 / EN54-5	EN54-5
Operating Type	A2S, A2R	
Built-in Isolator	Yes	No
Power	18-32VDC	
Average Consumption	80µA@32V	
Alarm Consumption	3mA	
Indicator Current	10mA	
Weight (Include Base / Not)	183gr / 125gr	
Dimensions (mm)	Ø110, h42	
Body Material and Color	ABS Plastic – White	
Alarm Indicator LED	RED	
Status LED	Blue	
Isolator LED	Yellow	No
Operating Temperature	-10°C ~ 70°C	
Humidity	95% RH	
Protection Class	IP30	



## TFD-1271

Intelligent Addressable Multi Detector (Optical Smoke and Heat) with Built-in Isolator

## TFD-1270

Intelligent Addressable Multi Detector (Optical Smoke and Heat)



**EN54-5 EN54-7 EN54-17 EN54-13**

TFD-1271 and TFD-1270 detectors use a combination of optical and heat detection technologies to sense fire and it can be connected to a two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate with Teknim Addressable control panels.

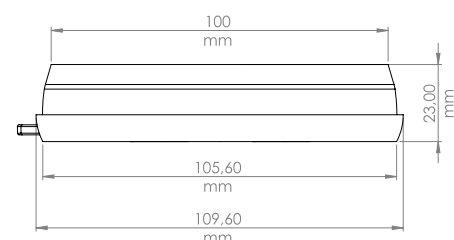
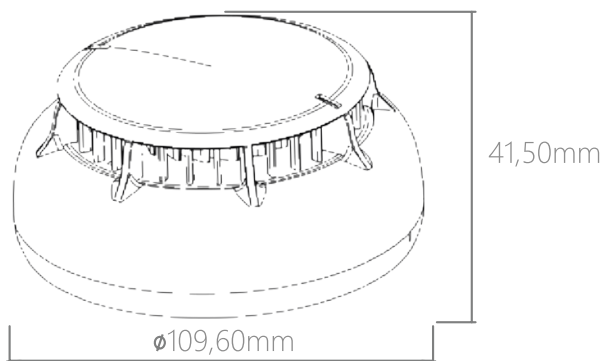
It has a series of algorithms to minimize faulty detections and provide pollution warning. Sensitivity levels are adjustable through the control panel or configuration software. The smoke chamber can be easily removed for cleaning in case of possible pollution in excessively dusty environments.

The operating logic of the detector can be selected from the control panel or software. The detector can work as "Only Smoke", "Only Heat", "Smoke and Heat", "Smoke or Heat".

### GENERAL FEATURES

- EN54-7, EN54-5 and EN54-17 Certified
- Detector supports optical smoke and heat sensing technologies
- Detector can be operating in 4 different types: Only Smoke, Only Heat, Smoke and Heat, Smoke or Heat
- Supports built-in Isolator (TFD-1271)
- Supports 2x LED indicators enabling 360° view
- Supports three different colors of indication by LEDs to individually display Status, Fire Alarm, Short-Circuit and Pollution (Blink Blue/Red/Fixed Blue/Yellow)
- 3 different detection sensitivities adjustable from the control panel and configuration software (High, Medium, Low)
- Special software algorithms to eliminate sudden dust, smoke, etc. which may cause faulty alarms
- Adaptive protection preventing faulty alarms by sampling the environment continuously
- Advanced pollution algorithm that continuously measures pollution level and warns the user from the detector and panel
- Supports remote indicator connection terminals
- Easy to clean smoke chamber
- Aesthetic and elegant design fits any environment
- Optional label apparatus can be installed to the bottom of the detector base view detector address from distance

Technical Specifications	TFD-1271	TFD-1270
Standard	EN 54-5 / 7 / 17	EN54-5 / 7
Operating Type	Optical / Heat	
Built-in Isolator	Yes	No
Detection Level	H:0,12 – m:0,15 – l:0,18 dB/m A2S (Between 55°C-70°C)	
Power	18-32VDC	
Average Consumption	80µA@32V	
Alarm Consumption	3mA	
Indicator Current	10mA	
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	
Isolator LED	Yellow	No
Operating Temperature	-10°C ~ 70°C	
Humidity	95% RH	
Protection Class	IP30	







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

Technical Specifications	TFA-1196
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

**TFA-0120**

Detector Base



Teknim TFA-0120 detector base is developed to be used with all Teknim Fire alarm detectors. Insert type contact structure minimizes non-contact problems on the field.

**TFA-0121**

Detector Label Tag



TFA-0121 is a label tag designed to be installed on detector base to easily view address information of detectors.



TFM-128X bases can be used with Teknim addressable detectors (TFD-12XX). TFM-128X bases can be in a formed such as isolator, buzzer and flasher which design to meet all needs of warning for the detectors.

### GENERAL FEATURES

- LED indicators enabling 360° view
- Two different colors of indication by LEDs to individually display shortcut and alarm conditions (Yellow/Red)
- 75dB sound level
- Different type of base options
- Label tag slot

### TYPES

- TFM-1281 Base with Buzzer
- TFM-1282 Base with Flasher
- TFM-1283 Base with Isolator
- TFM-1287 Base with Buzzer and Flasher



Technical Specifications	TFM-1281	TFM-1282	TFM-1283	TFM-1287
Operation	Buzzer	Flasher	Izolator	Buzzer + Flasher
LED Indicator	No	Yes	Yes	Yes
Buzzer	Yes	No	No	Yes
Sound Level	75dB	-	-	75dB
Flasher	No	Yes	No	Yes
Power	15-32V	15-32V	15-32V	15-32V
Standby Consumption	15µA	15µA	15µA	15µA
Alarm Consumption	2mA	4mA	15µA	6mA
Weight	120gr	120gr	120gr	120gr
Dimensions (mm)	Ø109,5 h48	Ø109,5 h48	Ø109,5 h48	Ø109,5 h48
Body Material and Color	ABS Plastic – White	ABS Plastic – White	ABS Plastic – White	ABS Plastic – White
Operating Temperature	-10°C ~ +70°C	-10°C ~ +70°C	-10°C ~ +70°C	-10°C ~ +70°C
Humidity	95% RH	95% RH	95% RH	95% RH

## TFD-1170

Intelligent Addressable Natural Gas Detector

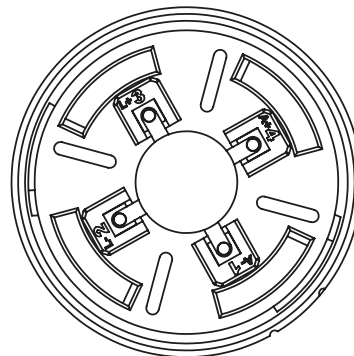
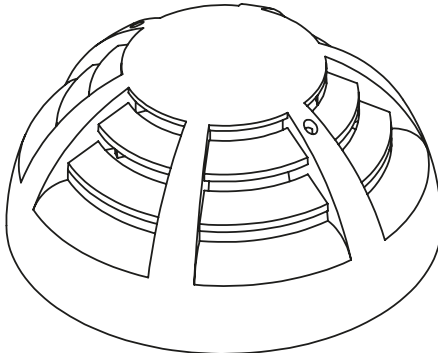
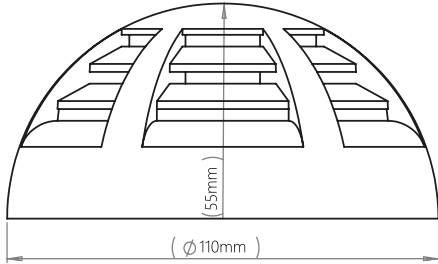


TFD-1170 is a natural gas detector which can be connected to Teknim addressable fire alarm systems. It is equipped with an 85dB on-board buzzer for audio warning, and with red/ yellow/ green colored LED indicators for visual warning. Alarm detection and filtering algorithm directly transmits precise and reliable alarm information to the control panel.

TFD-1170 addressable natural gas detector is suitable for ceiling and wall mounting. Detector also provides a test button on it to perform tests for all visual and audio warnings.

### GENERAL FEATURES

- TSE TS-EN 50184-1 Certified
- 85dB Alarm Sound Level
- TEST button for buzzer and LEDs
- 2x LED indicators enable 360° view from all directions
- Suitable for Ceiling and Wall Mounting



### Technical Specifications

### TFD-1170

Standard	TS-EN 50184-1
Operating Type	MQ5 Gas Sensor
Device Type	A
Gaz Algılama Seviyesi	%10 LEL
Sound Indicator	Continuous: Gas Alarm Intermittent: Sensor Fault
Sound Level	≥85dB (at 1mt)
LED Indicator	Alarm: RED ,Fault: Yellow Normal: Green
Test Button	Yes
Power	18–32 VDC
Average Consumption	<50uA
Alarm Consumption	<60uA
External Power	12-30 VDC
External Powered Consumption	50mA @24VDC
External Powered Alarm Consumption	60mA @24VDC
Start Time	3 min.
Dimensions (mm)	Ø110, h50
Body Material and Color	ABS Plastic – White
Operating Temperature	-10°C ~ +55°C
Humidity	95% RH
Protection Class	IPX2D

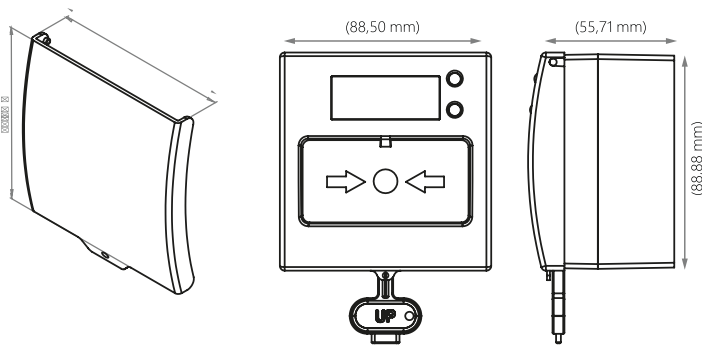
## TFB-1166

Intelligent Addressable Manual Call Point with Built-in Isolator



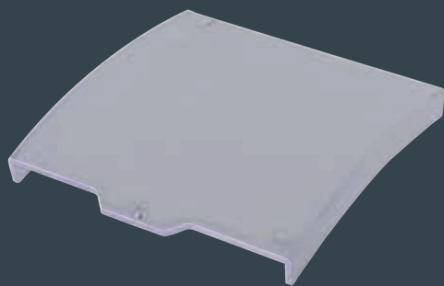
**EN54-11 EN54-17 EN54-13**

TFB-1166 is an addressable manual call point with built-in isolator, designed and produced comply with EN54-11 and EN54-17. It is equipped with dual LEDs to indicate local alarms (Red Colored LED) and short-circuit alert (Yellow Colored LED). TFB-1166 MCP can be used with TFP-12XX Addressable control panels through Flash Link protocol. 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.



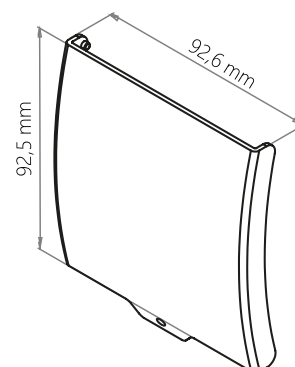
## TFA-0165

Transparent Protection Cover



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

Technical Specifications	TFB-1166
Standard	EN 54-11/17
Operating Type	A Type Manual
Resettable	Yes
Power	10-32VDC
Standby Consumption	1,5mA.
Alarm Consumption	6mA.
Shortcut Isolator Consumption	8mA.
Dimensions (mm)	86 x 55 x 88 mm
Weight	145gr
Body Material and Color	RAL3001 RED
Alarm Indicator LED	RED
Status LED	Blue
Isolator LED	Yellow
Type of Fragile Element	Resettable Polycarbonate
Operating Temperature	-10°C ~ 60°C
Humidity	≤93% RH at +40°C
Protection Class	IP30



## TFS-1181

Intelligent Addressable Sounder with Built-in Isolator



**EN54-3 EN54-17 EN54-13**

Teknim TFS-1181 is an internal usage fire alarm sounder and can connect directly to loop line. It can be powered by loop line and has built-in isolator to protect the loop against shortcuts.

TFS-1181 has aesthetic design and low power consumption and are suitable for use with all Teknim addressable fire alarm control panels.

### GENERAL FEATURES

- EN54-3 and EN54-17 Certified
- Built-in Isolator
- 97dB Sound level
- 42 Different Sound Tone
- 3 Different Sound Level Options
- IP21C protection class
- Red/White, transparent UL94 non-flammable poly-carbonate plastic frame

### Technical Specifications

#### TFS-1181

Standard	EN54-3 and EN54-17
Power	15VDC – 32VDC (Norm.27VDC)
Average Consumption	~90µA (@ 27VDC)
Alarm Consumption	Min.: 5.16mA, Norm.: 7.86mA, Max.: 11.23mA.
Sounder Type	Type A
Sound Level	Min: 89.4dB / Norm: 94.3dB / Max: 97dB ±2 dB (@27VDC, 1mt)
Usage	Internal
Dimensions (mm)	Ø110, h:55 mm
Weight	27.7gr
Body Material	Red, UL94 anti- flammable ABS plastic
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C



## TFS-1182R/W

Intelligent Addressable Sounder and Flasher with Built-in Isolator



teknim®



**EN54-3 EN54-23 EN54-17 EN54-13**

Teknim TFS-1182 is an internal usage fire alarm sounder with flasher and can connect directly to loop line. It can be powered by loop line and has built-in isolator to protect the loop against shortcuts. TFS-1182 supports 42 different tone and 3 different flasher mode options.

TFS-1182 has aesthetic design and low power consumption and are suitable for use with all Teknim addressable fire alarm control panels.

### GENERAL FEATURES

- EN54-3, EN54-23 and EN54-17 Certified
- Built-in Isolator
- 97dB Sound level
- 42 Different Sound Tone
- 3 Different Sound Level Options
- 3 Different Flasher Mode
- 3 Different Brightness Mode
- Red/White, transparent UL94 non-flammable poly carbonate plastic frame

Technical Specifications	TFS-1182W/R
Standard	EN54-3, EN54-23 and EN54-17
Power	15VDC – 32VDC (Norm.27VDC)
Average Consumption	~90µA (@ 27VDC)
Alarm Consumption	Min.: 6.74mA, Norm.: 11.06mA, Max.: 15.1mA.
Sounder Type	Type A
Sound Level	Min: 89.4dB / Norm: 94.3dB / Max: 97dB ±2 dB (@27VDC, 1mt)
LED	7 Wide Angle Bright LEDs
Flasher Coverage	W-2, 4-4
Usage	Internal
Dimensions (mm)	Ø110, h:55 mm
Weight	27.7gr
Body Material - Color	UL94 anti- flammable ABS plastic RED – TFS-1182R , White – TFS-1182W
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C

## TFS-1183R/W

Intelligent Addressable Flasher with Built-in Isolator



**EN54-23 EN54-17 EN54-13**

Teknim TFS-1183 is an internal usage fire alarm flasher and can connect directly to loop line. It can be powered by loop line and has built-in isolator to protect the loop against shortcuts. TFS-1183 supports 3 different flasher mode and brightness options.

TFS-1183 has aesthetic design and low power consumption and are suitable for use with all Teknim addressable fire alarm control panels.

### GENERAL FEATURES

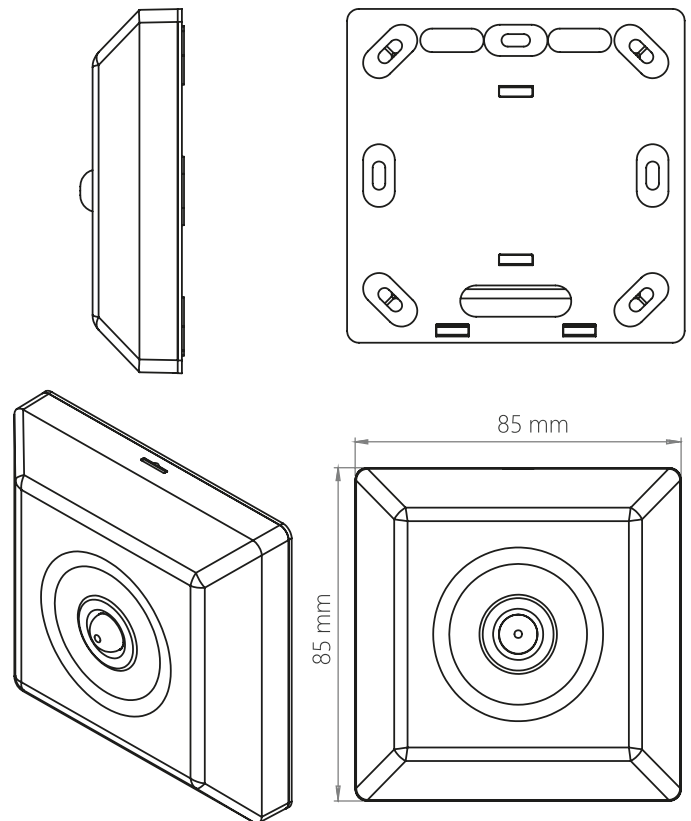
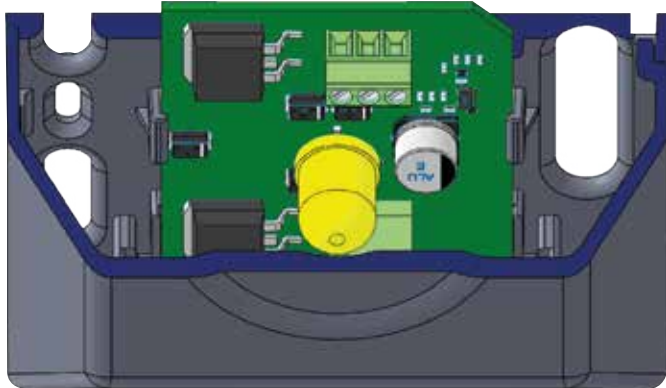
- EN54-23 and EN54-17 Certified
- Built-in Isolator
- 3 Different Flasher Mode
- 3 Different Brightness Mode
- White and Red Color Options
- Red/White, transparent UL94 non-flammable poly carbonate plastic frame

Technical Specifications	TFS-1183W/R
Standard	EN54-23, and EN54-17
Power	15VDC – 32VDC (Norm.27VDC)
Average Consumption	~90µA (@ 27VDC)
Alarm Consumption	Min.: 5.16mA, Norm.: 7.86mA, Max.: 11.23mA.
LED	7 Wide Angle Bright LEDs
Flasher Coverage	W-2, 4-4
Usage	Internal
Dimensions (mm)	Ø110, h:55 mm
Weight	27.7gr
Body Material - Color	UL94 anti- flammable ABS plastic RED – TFS-1182R White – TFS-1182W
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP21C

TFM-1990 is used on loop line to protect the system in case of any short-circuit on the line. It does not consume any address in the system.



Technical Specifications	TFM-1990
LED	Yellow
Light	150mcd
Power	10-32VDC
Standby Consumption	850µA.
Alarm Consumption	1,4mA.
Dimensions (mm)	85 x 85 x 21 mm
Weight	46gr
Body Material and Color	ABS Plastic – White
Operating Temperature	-10°C ~ +55°C
Humidity	0-95% RH
Protection Class	IP30



## TFM-1661

Intelligent Addressable Zone and Siren Module with Built-in Isolator

**EN54-18** **EN54-17** **EN54-13**



TFM-1661 Conventional Zone and Siren Module is designed to be used with TFP-12xx series addressable fire alarm panels and allows the use of conventional devices in the addressable system, which can transmit alarm and fault information via the loop in a zonal sense and gives a siren output. The device is supports built-in isolator to protect the loop line against short circuit.

For the conventional input status, the user can choose between the event types "Alarm, Evacuation, Reset, Silent, Fault, None". It is also possible to select from "Siren, General Siren, General Fault, Zonal Alarm, Zonal Siren, Zonal Fault, None" event types for siren output. The module has 24V external power supply input. The external supply is used for the supply of conventional devices and the siren outputs. The external supply is supervised for interruptions on power.

### GENERAL FEATURES

- EN54-18 and EN54-17 Certified
- 32 detectors per zone and unlimited buttons
- Built-in Isolator
- 4 LED indicators



Technical Specifications	TFM-1661
Standard	EN 54-17 / 18
Power	18-32 VDC
Standby Consumption	150uA
Alarm Consumption	1,5 mA
External Power	22V- 26VDC
Standby Consumption from Ext Power	20mA @24V + Zone and Sounder Consumption
Alarm Consumption from Ext Power	40mA @24V + Zone and Sounder Consumption
Number of Detector Support	32
Cable Resistance	40Ω
Dimensions (mm)	100 x 66 x 33,5mm
Body Material and Color	ABS Plastic Light Grey
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH

# TFM-1431

Intelligent Addressable I/O Module with Built-in Isolator



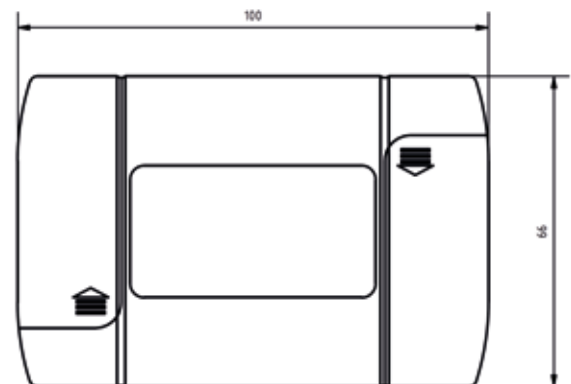
**EN54-18** **EN54-17** **EN54-13**



TFM-1431 used with TFP-12xx series addressable fire alarm panels and supports single input and output. The device is also supporting built-in isolator to protect the loop line against short circuit.



Technical Specifications	TFD-1431
Standard	EN 54-17 / 18
Power	15-32VDC
Standby Consumption	180µA
Alarm Consumption	500µA
Isolator	Yes
Terminals	1x Monitored Input , 1x Monitored Output
Dimensions (mm)	100 x 66 x 33,5mm
Body Material and Color	ABS Plastic Light Grey
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30





# TFM-1XXX

Intelligent Addressable Input Module with Built-in Isolator



**EN54-18 EN54-17 EN54-13**

**TFM-1011** supports single monitored input and can be used with TFP-12xx series addressable fire alarm panels. The device is also supporting built-in isolator to protect the loop line against short circuit.

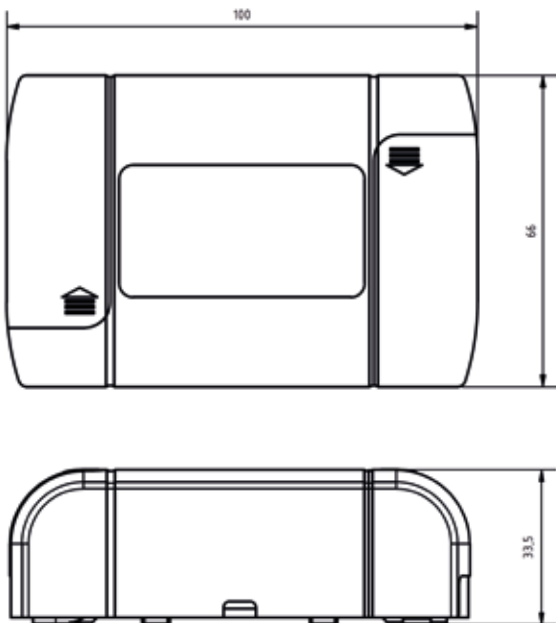
**TFM-1221** supports single monitored input and single output which supports external power connection and allows to connect such as conventional sounders etc. It can be used with TFP-12xx series addressable fire alarm panels. The device is also supporting built-in isolator to protect the loop line against short circuit.



## PRODUCT TYPES

**TFM-1011** Intelligent Addressable Input Module with Built-in Isolator

**TFM-1221** Intelligent Addressable I/O Module with Built-in Isolator



Technical Specifications	TFM-1011	TFM-1221
Standard	EN54-18 and EN54-17	EN54-18 and EN54-17
Power	15-32VDC	15-32VDC
Standby Consumption	180µA	180µA
Alarm Consumption	500µA	500µA
Isolator	Yes	Yes
Terminals	1x Monitored Input	1x Monitored Input 1x Monitored Output (External Power)
Cable Resistance	40Ω	40Ω
Dimensions (mm)	100 x 66 x 33,5mm	100 x 66 x 33,5mm
Body Material and Color	ABS Plastic Light Grey	ABS Plastic Light Grey
Operating Temperature	-10°C ~ 55°C	-10°C ~ 55°C
Humidity	95% RH	95% RH
Protection Class	IP30	IP30

# CONVENTIONAL FIRE ALARM SYSTEM



# TFP-404

4 Zone Conventional Fire Alarm Panel



**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.

## GENERAL FEATURES

- 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)

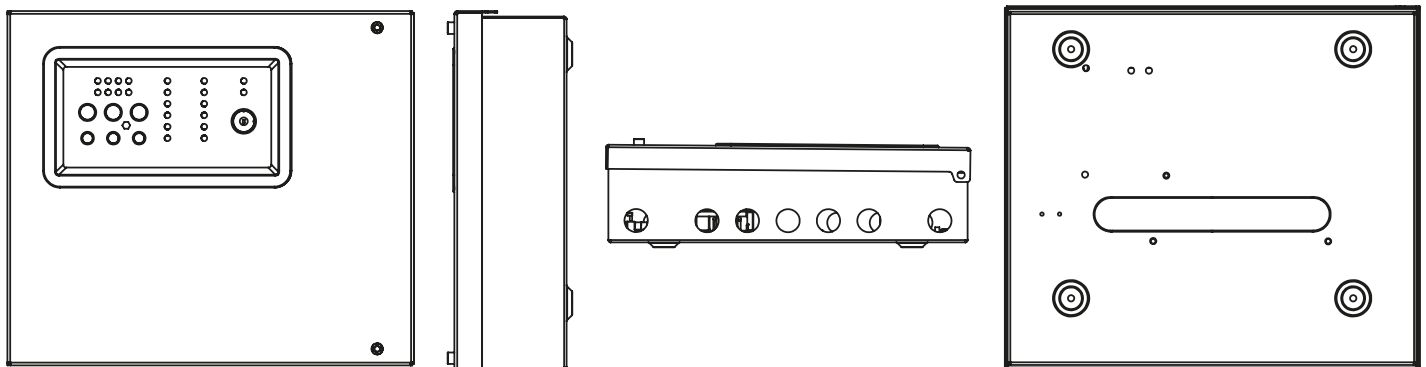


# TFP-404

4 Zone Conventional Fire Alarm Panel



General Specifications	TFP-404
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



# TFP-408

8 Zone Conventional Fire Alarm Panel



**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.

## GENERAL FEATURES

- 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)



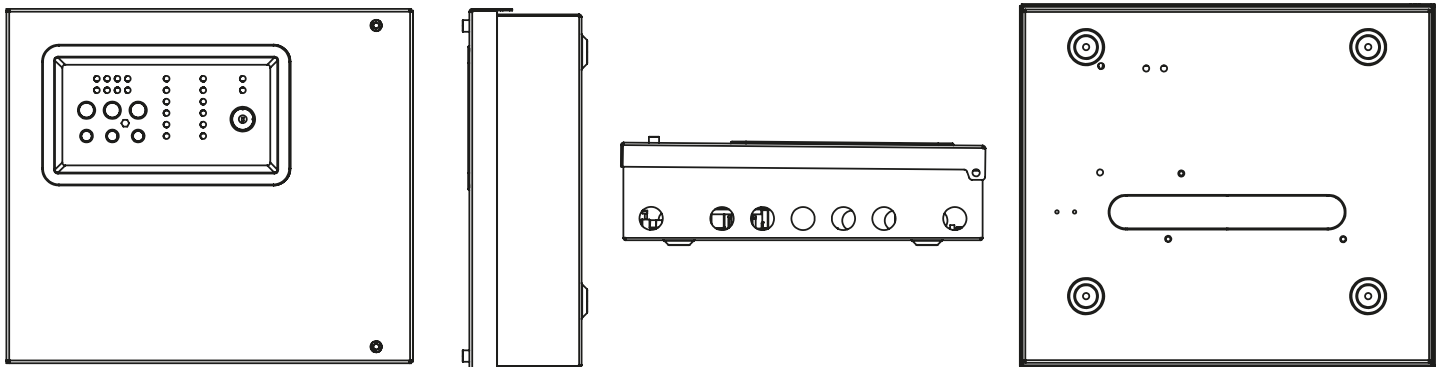


# TFP-408

8 Zone Conventional Fire Alarm Panel



General Specifications	TFP-408
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 ( $\pm$ 5%)
Power Fuse	2A
Backup Battery	2X 12V, 7Ah
Imin	75mA
I <sub>maxA</sub>	500 mA
I <sub>maxB</sub>	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
Protection Class	IP30



# TFD-4230

Conventional Optical Smoke Detector



**EN54-7**

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.

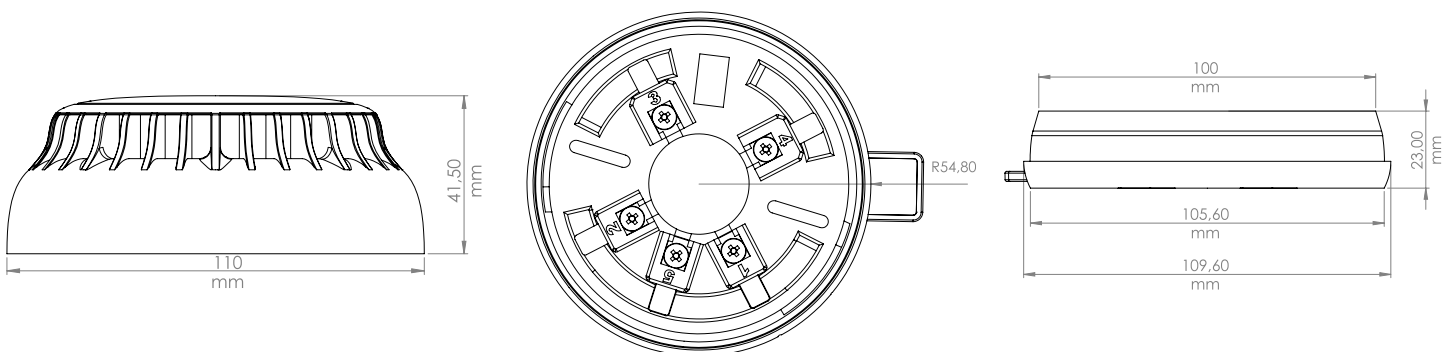
## GENERAL FEATURES

- 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
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

## Technical Specifications

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 470Ω)
Indicator Current	10mA @24V (Limited with 2K2Ω)
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



**EN54-5**

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.

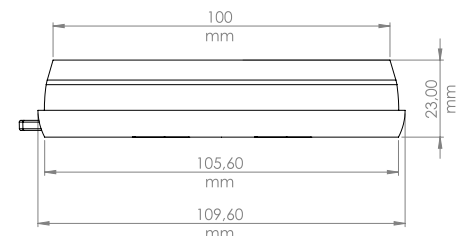
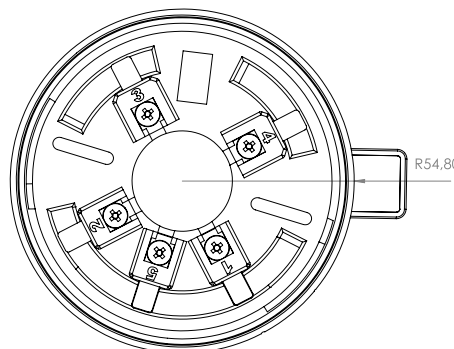
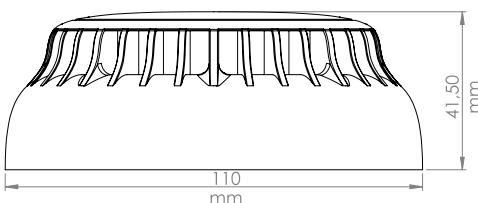
## GENERAL FEATURES

- 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

## Technical Specifications

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



**EN54-5**

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.

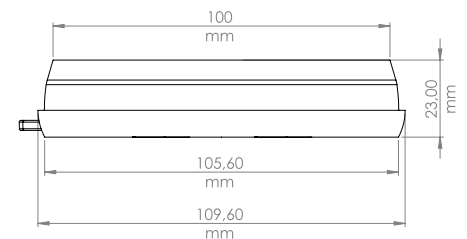
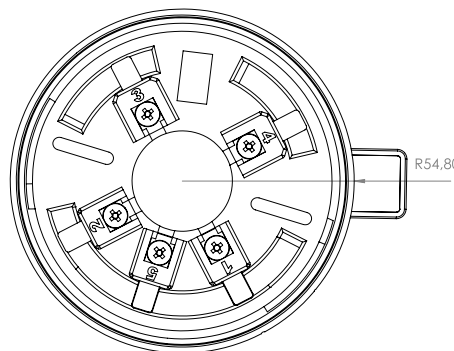
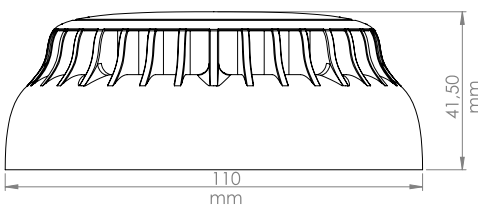
## GENERAL FEATURES

- 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

## Technical Specifications

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



# TFD-4250

Conventional Multi Detector (Optical Smoke and Heat)



**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.

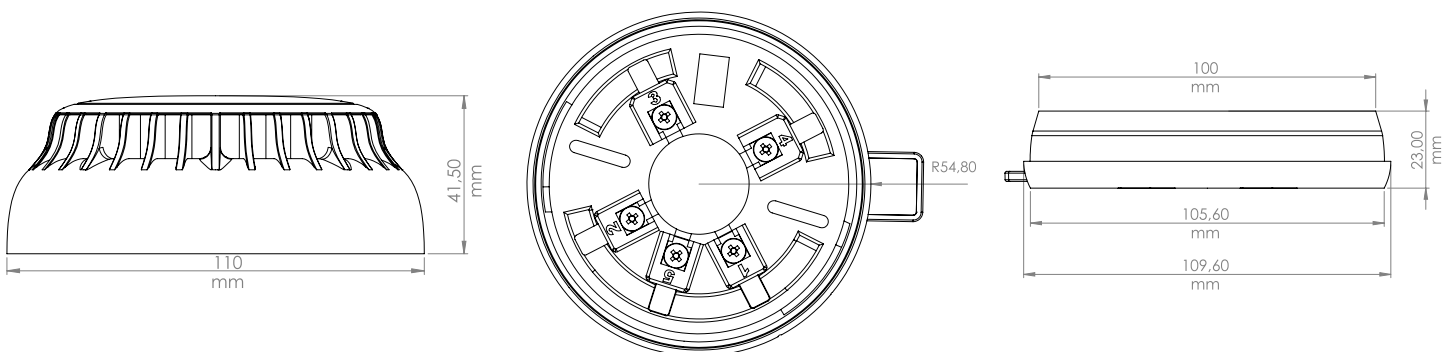
## GENERAL FEATURES

- 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 Parallel Indicator Connection Terminals
- Easy to Clean Smoke Chamber
- Aesthetic and Elegant Design Fits any Environment
- Compatible with any Brand of Conventional Fire Panel

## Technical Specifications

## 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



**EN54-7**

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.

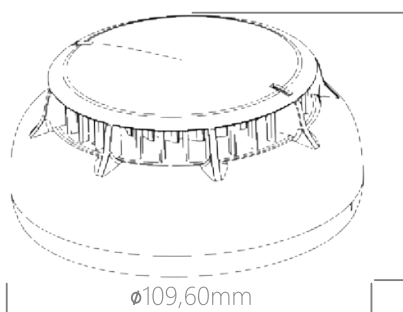
## GENERAL FEATURES

- 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

## Technical Specifications

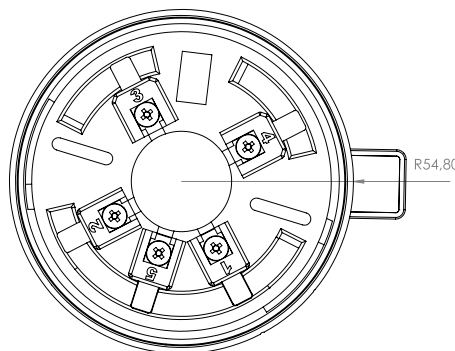
TFD-3230

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 Ω)
Indicator Current	10mA @24V (Limited with 2K2 Ω)
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

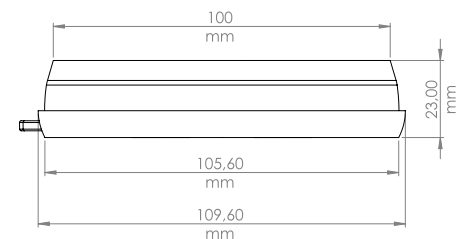


41,50mm

Ø109,60mm



R54.80



100

mm

105.60

mm

109.60

mm

23.00

mm



# TFD-3240

Conventional Fixed Heat Detector



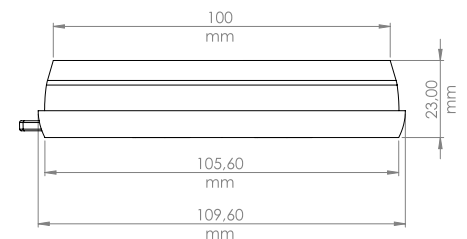
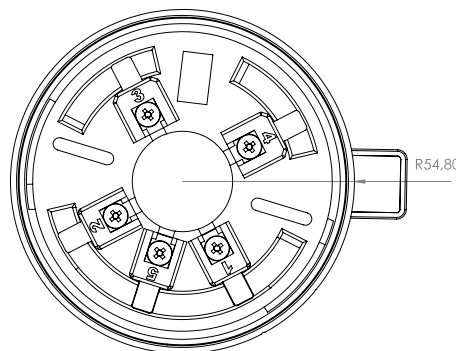
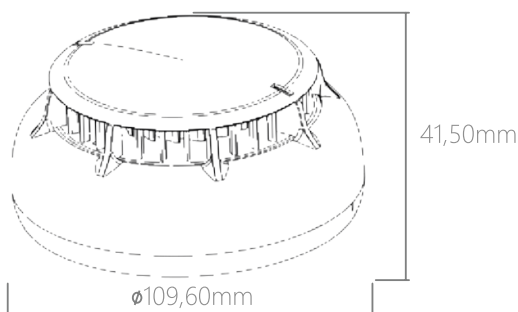
**EN54-5**

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.

## GENERAL FEATURES

- 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

Technical Specifications	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



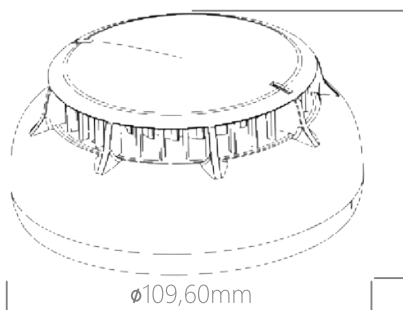
**EN54-5**

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

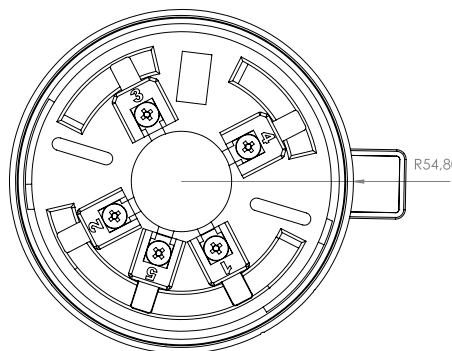
- Conforms EN54-5
- Designed with 2 NTCs to ensure more accurate and precise temperature measurement
- Detector can be operating as A2R class
- 2 LED indicators enabling 360° view
- Two different colors of indication by LEDs to individually display error and alarm conditions (Blue/Red)
- Supports remote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

Technical Specifications	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

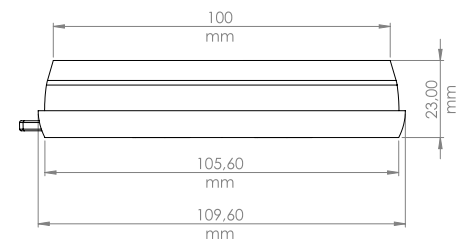


41,50mm

Ø109,60mm



R54.80



100  
mm

105.60  
mm

109.60  
mm

23.00  
mm

# TFD-3250

Conventional Multi Detector (Optical Smoke and Heat)



**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.

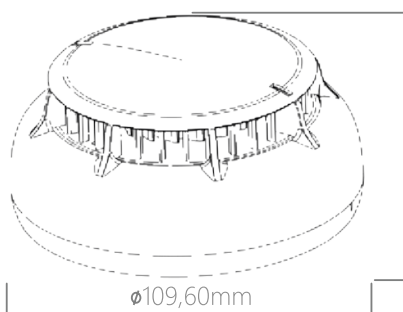
## GENERAL FEATURES

- 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

## Technical Specifications

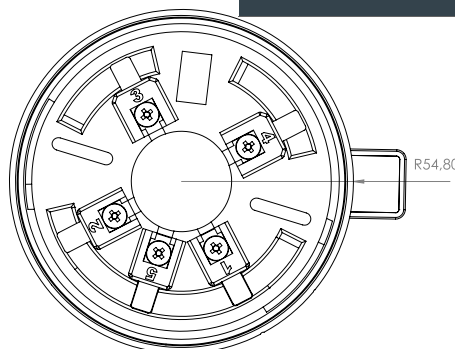
## TFD-3250

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

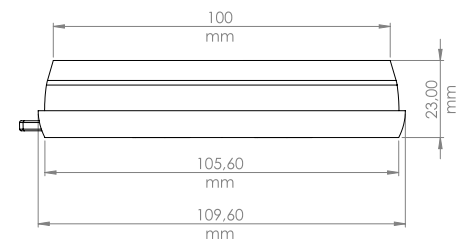


41,50mm

Ø109,60mm



R54.80



100  
mm

105.60  
mm

109.60  
mm

23.00  
mm

## TSD-701

Conventional Natural Gas Detector



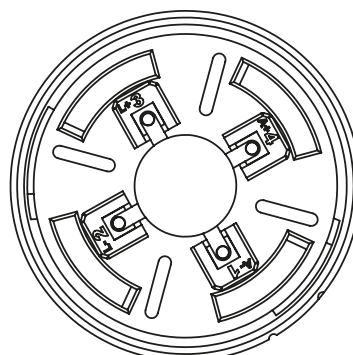
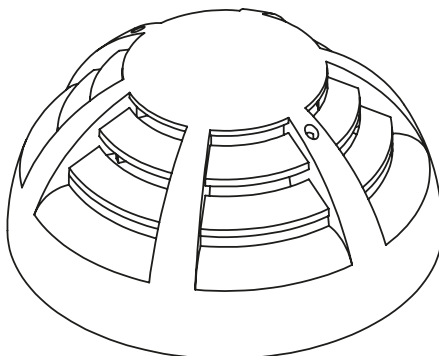
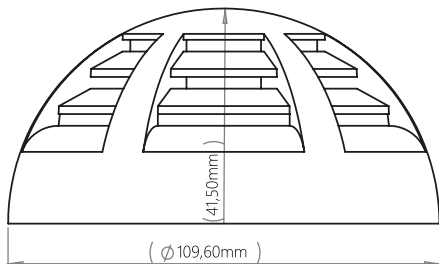
teknim®



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.

### GENERAL FEATURES

- 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



Technical Specifications	TSD-701
Standard	TS-EN 50184-1
Operating Type	MQ5 Gas Sensor
Device Type	A
Detection Level	%10 LEL
Sound Indicator	Continuous: Gas Alarm Intermittent: Sensor Fault
Sound Level	≥85dB (at 1mt)
LED Indicator	Alarm: RED, Fault: Yellow Normal: Green
Test Button	Yes
Power	12-24VDC
Average Consumption	12VDC/100mA ,24VDC/50mA
Alarm Consumption	12VDC/100mA, 24VDC/50mA
Relay	NO for Fire Systems NC for Intruder Systems
Start Time	3 min.
Dimensions (mm)	Ø110 h:50
Body Material and Color	ABS Plastic – White
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IPX2D

# TFA-3196

Conventional Remote Indicator

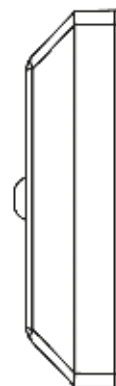
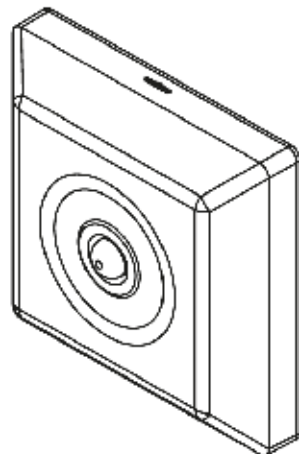
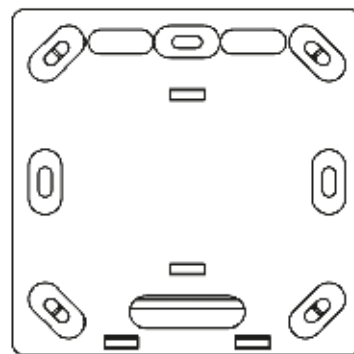
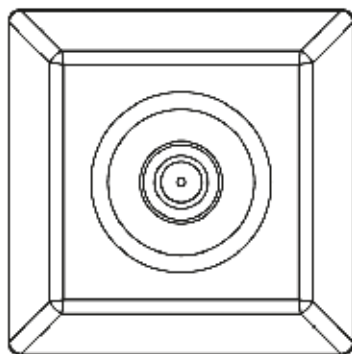


teknim®



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

Conventional Manual Call Point



**EN54-11**

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.

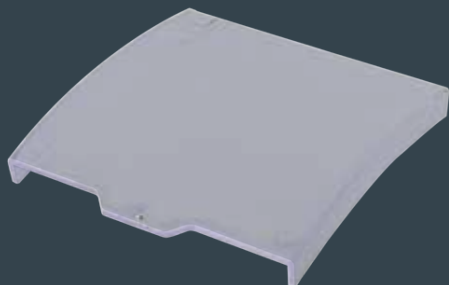
## GENERAL FEATURES

- 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 Sealed
- Suitable for Flush and Surface Mounting
- Compatible with All Conventional Fire Alarm Systems r

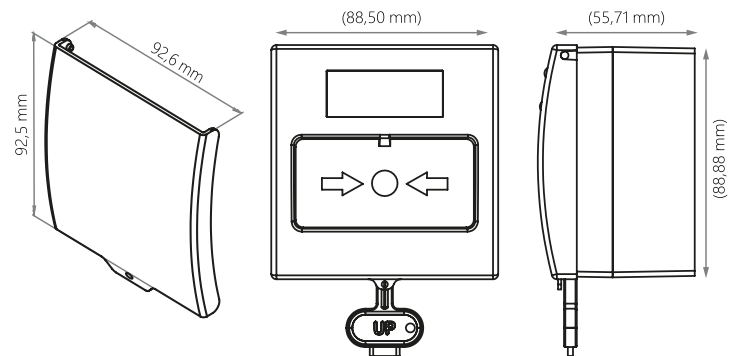
Technical Specifications	TFB-3165
Standard	EN 54-11
Operating Type	A Type Manual
Resettable	Yes
Relay	NC/NO/470 Ohm
Power	5-32VDC
Dimensions (mm)	86 x 55 x 88 mm
Weight	165gr
Body Material and Color	RAL3001 RED
Type of Fragile Element	Resettable Polycarbonate
Operating Temperature	-10°C ~ 60°C
Humidity	≤93% RH at +40°C
Protection Class	IP30

## TFA-0165

Transparent Protection Cover



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





# TFB-3165X

Conventional Emergency Call Points



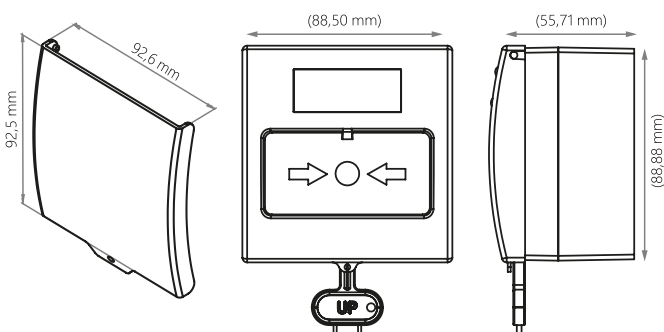
Designed to be connected to any brand of conventional fire detection systems. Internal 470-ohm resistance allow ease of installation. It is suitable for flush and surface mounting. An optional transparent protective cover can be installed. It is easily resettable via special key.

## GENERAL FEATURES

- 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-3165O**, - 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

# TFS-3191

Conventional Fire Alarm Sounder



**EN54-3**

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

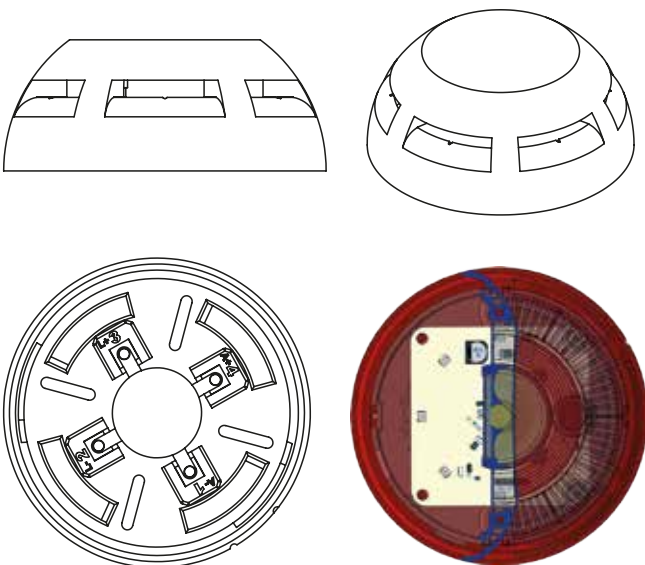
## GENERAL FEATURES

- 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

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



## TFS-3192R/W

Conventional Fire Alarm Sounder with Flasher

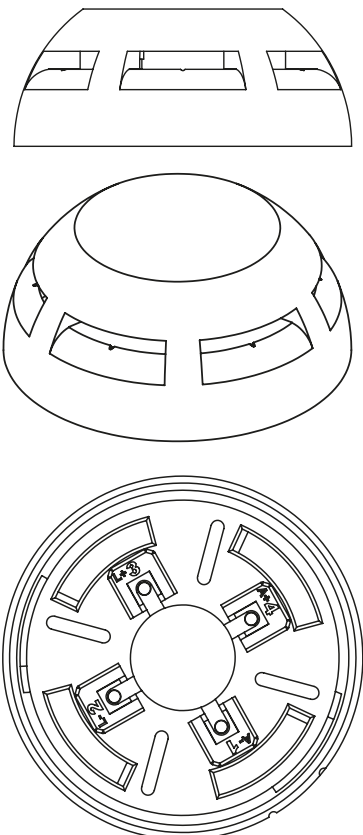


**EN54-3 EN54-23**

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.

### GENERAL FEATURES

- 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

**TFS-3193R/W**  
Conventional Fire Alarm Flasher



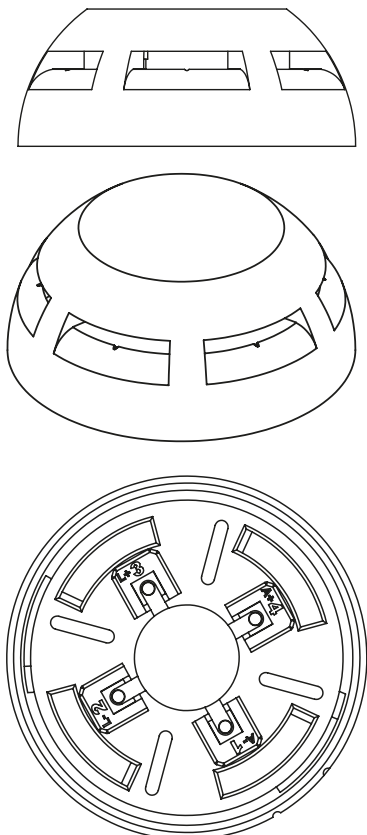
**EN54-23**

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.

**GENERAL FEATURES**

- 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



teknim®



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

### GENERAL SPECIFICATIONS

- 6X Super Bright LED / Flasher
- 115dB/24V @1mt
- IP65 Protection

### Technical Specifications

### 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

## TFD-3940

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.

### GENERAL FEATURES

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

### Technical Specifications

### TFD-3940/TFD-3945

	Optical and Heat	Cigarette and Heat
Operating Type	Optical and Heat	Cigarette and Heat
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

External Power Supply 24VDC 5Ah

## EN54-4

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.



## GENERAL FEATURES

- 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



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 $\pm$ 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



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

### GENERAL FEATURES

- 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

Technical Specifications	TR6100
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





**teknim**<sup>®</sup>

[www.teknim.com](http://www.teknim.com)

Dudullu OSB 1. Cd. İsmet Tarman İş Mrk. N:1 K:2/32 Ümraniye/İstanbul  
0 (216) 455 88 46 - [sales@bilgielektronik.com.tr](mailto:sales@bilgielektronik.com.tr)