# INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM

## EN54-13


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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

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

TFP-12XX 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-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 monitor and configure by Teknim Cloud Based Mobile Application.

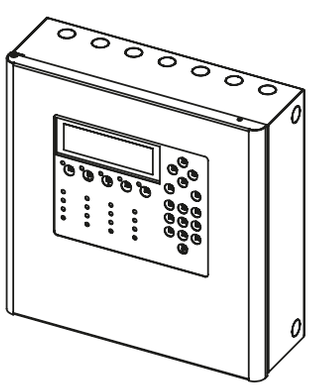
TFP-12XX comes with an LCD graphic display onboard to easily understand the error and alarm warnings and to make all the settings of the device.

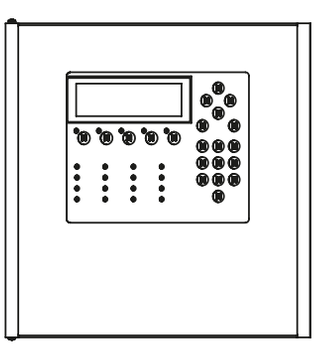
TFP-12XX Fire Alarm Panels are designed in accordance with European Standards which supports EN54-2 and EN54-4 Certificates.

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 Specifection

| 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 | | |
| **Loop Information** | | | |
| 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<br>1000mt @ 0,8mm (@250 mA)<br>2000 mt @ 0,8mm (@75 mA)<br>2000 mt @ 1,5mm (@250 mA)<br>2500 mt @ 2mm (@250 mA) | | |
| **Network** | | | |
| Protocol | TdNET (RS-485) | | |
| Max. Panel Network | 16<br>(TFC-1209 Network Card Needed) | | |
| **Mechanical** | | | |
| Dimensions (mm) | 385 x 380 x 130 mm | | |
| Body Material and Color Options | Metal Light Grey – TFP-1211<br>Red – TFP-1211R | | |
| Weight | 6,5Kg (Without Battery) | | |
| **Environmental** | | | |
| Operating Temperature | -10°C ~ 55°C | | |
| Humidity | 95% RH | | |
| Protection Class | IP30 | | |
| **Power** | | | |
| 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 | | |
| **Outputs** | | | |
| 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.

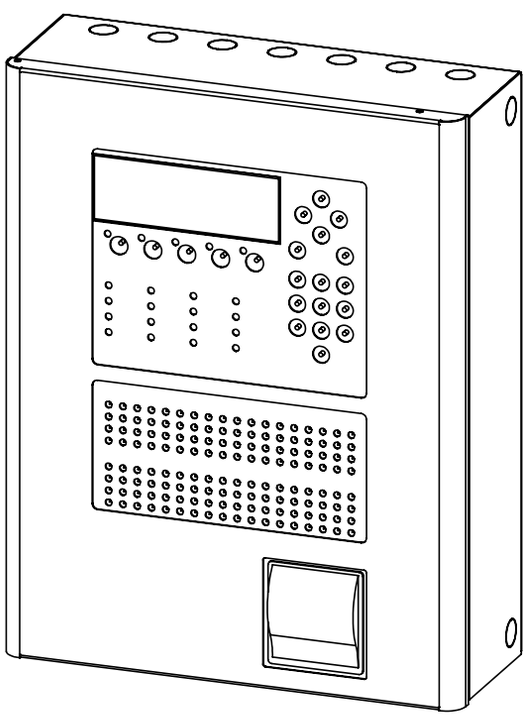
TFP-21XX comes with an LCD graphic display onboard to easily understand the error and alarm warnings and to make all the settings of the device. Panel supports 72 zones LED indicator to indicate alarms, faults, disabled zones and test conditions.

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

teknim®

| 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 |
| **Loop Information** | | | | | | |
| 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<br>1000mt @ 0,8mm (@250 mA)<br>2000 mt @ 0,8mm (@75 mA)<br>2000 mt @ 1,5mm (@250 mA)<br>2500 mt @ 2mm (@250 mA) | | | | | |
| **Network** | | | | | | |
| Protocol | TdNET (RS-485) | | | | | |
| Max. Panel Network | 16<br>(TFC-1209 Network Card Needed) | | | | | |
| **Mechanical** | | | | | | |
| Dimensions (mm) | 485 x 387 x 145 mm | | | | | |
| Body Material and Color Options | Metal Light Grey – TFP-21XX<br>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.) |
| **Environmental** | | | | | | |
| Operating Temperature | -10°C ~ 55°C | | | | | |
| Humidity | 95% RH | | | | | |
| Protection Class | IP30 | | | | | |
| **Power** | | | | | | |
| 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 |
| ImaxA | 1A | | | | | |
| ImaxB | 1,5A | | | | | |
| **Outputs** | | | | | | |
| 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 | | | | | |

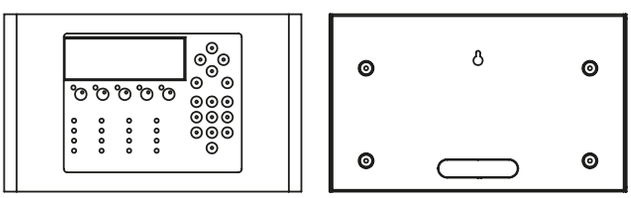
# TFP-1240
Intelligent Addressable Repeater

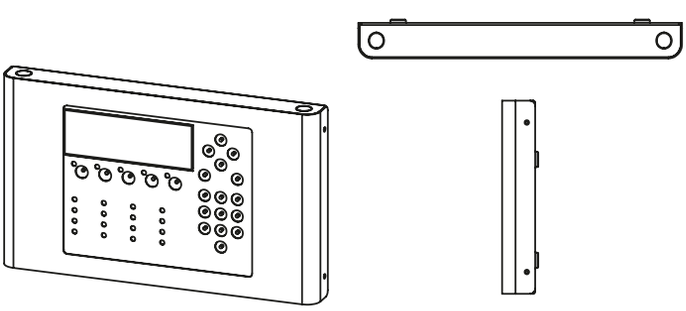
Teknim TFP-1240 repeater panel is developed to monitor and intervene fire detection systems from different points at large and medium scale enterprises. It can be connected approximately up to 1.000 mt distance from main panel via RS-485 communication layer.

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 |
| **Mechanical** | |
| Dimensions (mm) | 230 x 386 x 40 mm |
| Weight | 2,6Kg |
| Body material and color | Metal<br>Light Grey – TFP-1240<br>Red – TFP-1240R |
| **Environmental** | |
| 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

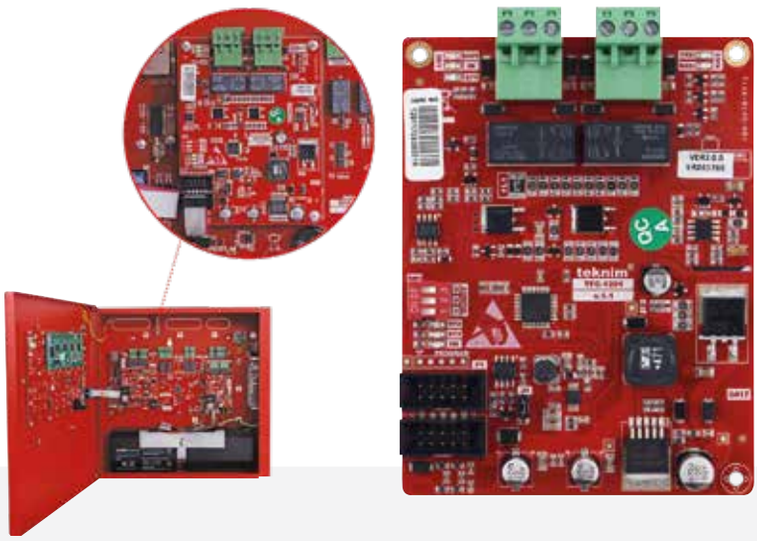
### TdNET® NETWORK COMMUNICATION PROTOCOL

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



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 Programmer


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.

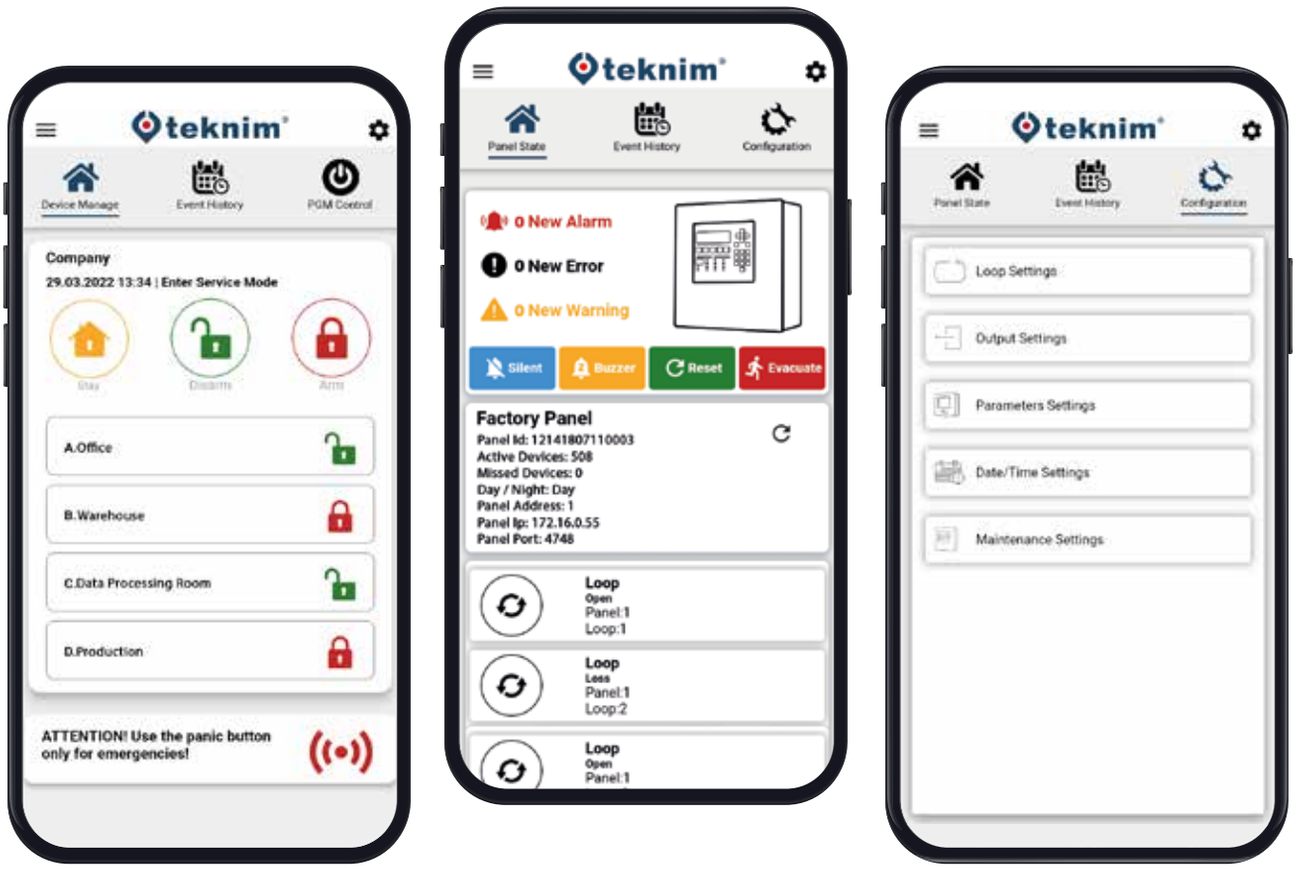
Practical menu interface and controls enable ease of use.

## 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 MOBILE APPLICATION




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

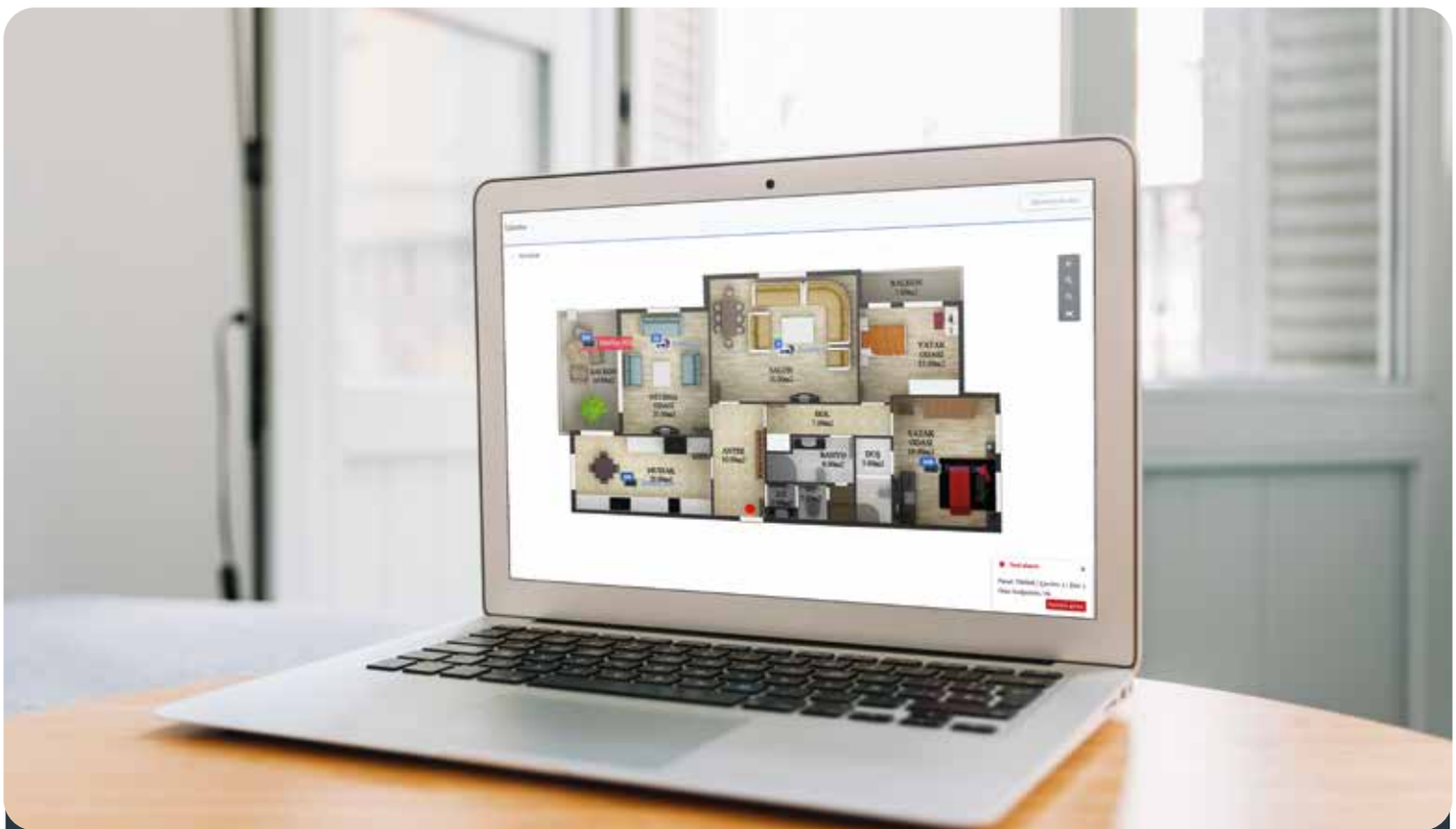
Teknim Mobile application can be downloaded free of charge from the App Store and Android Market.

Available on the App Store

ANDROID APP ON Google Play

# MOSAIC-2000

Teknim Addressable Fire Alarm Monitoring Software

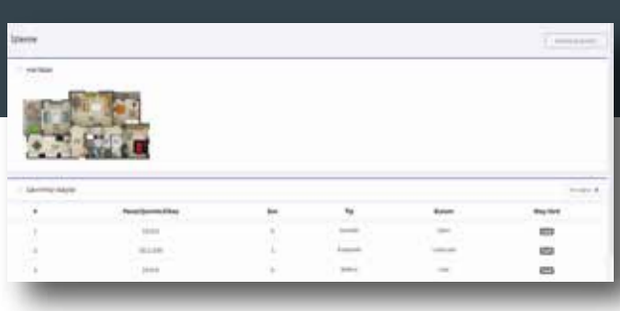


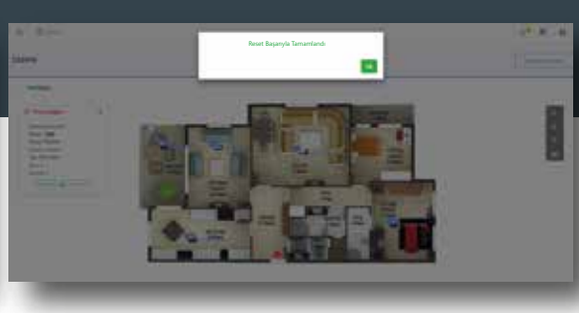
**Mosaic-2000 is a web based graphical monitoring software for Teknim addressable fire alarm system. It supports adding multiple maps for projects and providing adding all devices on maps according to project needs.**

**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





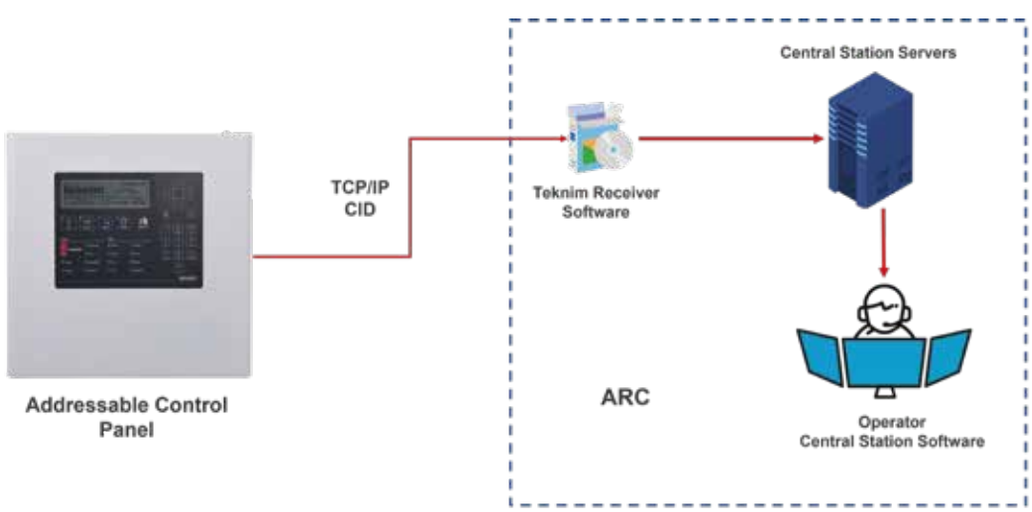
# TFY-1000
Teknim Addressable Fire Alarm Configuration Software

# 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 softwareeasy to use.It saves installers from significant time losses during configuration.In addition to the functional features on the control panel, the softwarehas 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**

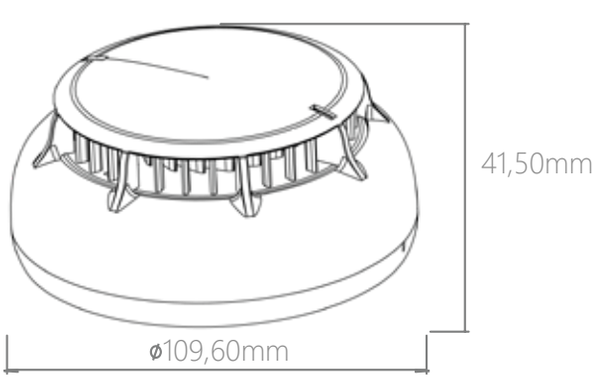
TFD-1251 and TFD-1250 Detectors are designed to be connected two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate Teknim Addressable control panels. Detector supports optical sensing technology by using a unique smoke chamber perfected by Teknim,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

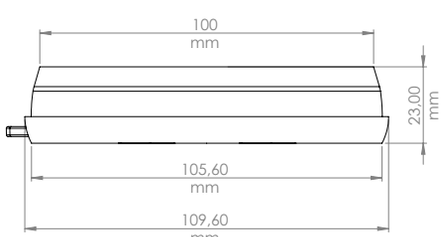
Detector supports built-in isolator version (TFD-1251) to protect the loop line from short-circuit.

## 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 individu ally 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**

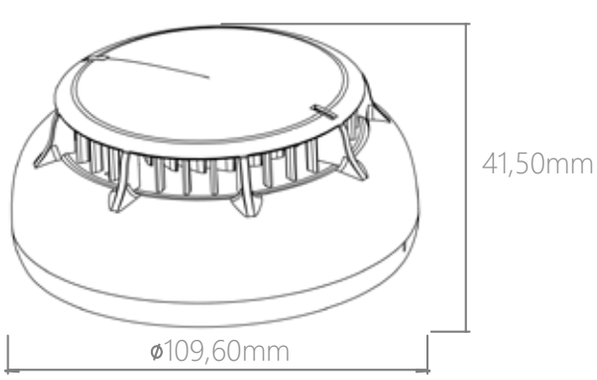
TFD-1261 and TFD-1260 Detectors uses heat detection technologies to sense fire and it can be connected two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate Teknim Addressable control panels. It has a series of algorithms to minimize faulty detections.

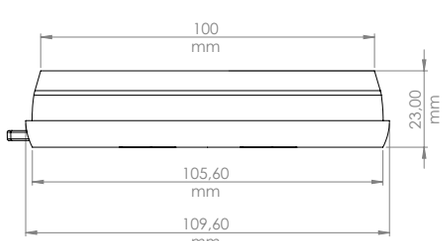
Detector can work as Fixed Heat or Heat Rise which can be selected from control panel or configuration software and complies with EN54-5 and EN54-17.

## 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)

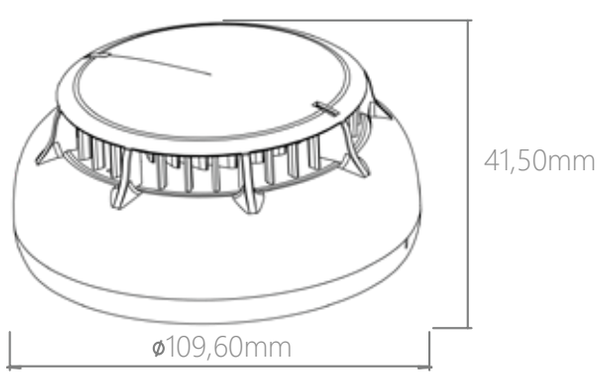
**EN54-5 EN54-7 EN54-17 EN54-13**

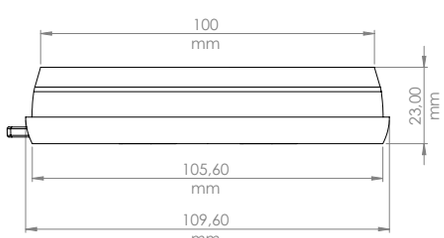
TFD-1271 and TFD-1270 detectors are uses combination of optical and heat detection technologies to sense fire and it can be connected two-wired loop circuit carrying both data and power. It uses FlashLink communication protocol to communicate Teknim Addressable control panels.
It has a series of algorithms to minimize faulty detections 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.
The operating logic of the detector can be selected from the control panel or software. Detector can be 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 enables 360° view
- Supports Three different colors of indication by LEDs to individu ally 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-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 – I: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 | |



# TFA-1196
TFA-1196 Remote Indicator

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
Detector Bases

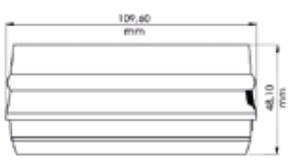
TFM-128X bases can be used with Teknim addressable detectors (TFD-12XX). TFM-128X bases can be in a formed such as isolator, Sounder and flasher which design to meet all needs of warning for the detectors.

## 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 Sounder Base
- TFM-1282 Base with Flasher
- TFM-1283 Base with Isolator
- TFM-1287 Base with Sounder and Flasher




| Technical Specifications | TFM-1281 | TFM-1282 | TFM-1283 | TFM-1287 |
|---|---|---|---|---|
| Operation | Sounder | Flasher | Izolator | Sounder+ 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 |

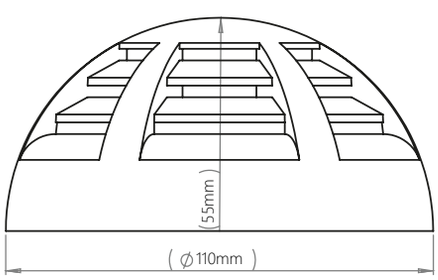
# TFD-1170
Intelligent Addressable Natural Gas Detector

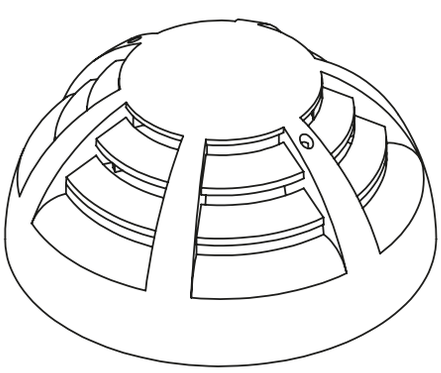
TFD-1170 is a natural gas detector which can be connected to Teknim addressable fire alarm systems. It is equipped with an 85dB on-board buzzer for audio warning, and with red/ yellow/ green colored LED indicators for visual warning.
Alarm detection and filtering algorithm directly transmits precise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

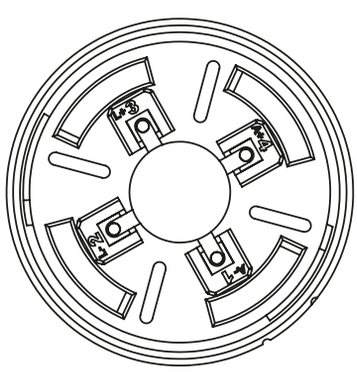
## GENERAL FEATURES

- 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<br>Intermittent: Sensor Fault |
| Sound Level | ≥85dB (at 1mt) |
| LED Indicator | Alarm: RED ,Fault: Yellow<br>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 |



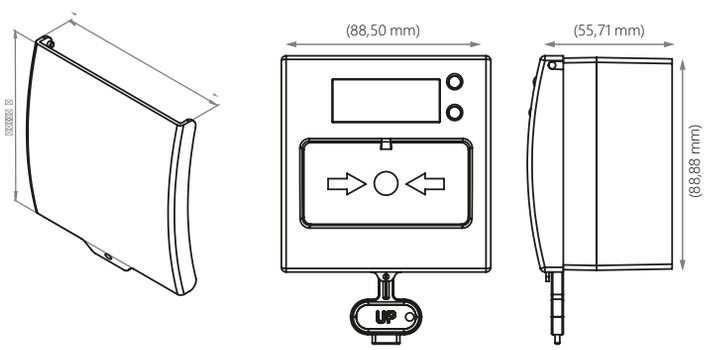


# TFB-1166

Intelligent Addressable Manual Call Point with Built-in Isolator

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

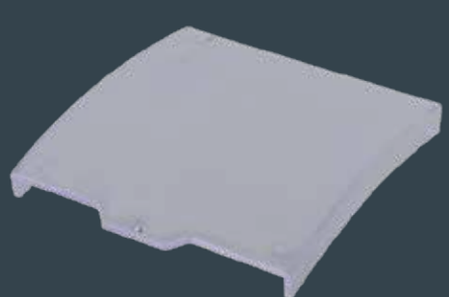
TFB-1166 is an addressable manual call point with built-in isolator, designed and produced comply with EN54-11 and EN54-17. It is equipped with dual LEDs to indicate local alarms (Red Colored LED) and short-circuit alert (Yellow Colored LED). TFB-1166 MCP can be used with TFP-12XX Addressable control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



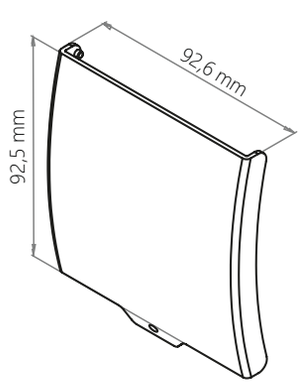

| Technical Specifications | TFB-1166 |
|---|---|
| Standard | EN 54-11/17 |
| Operating Type | A Type Manual |
| Resettable | Yes |
| Power | 10-32VDC |
| Standby Consumption | 1,5mA. |
| Alarm Consumption | 6mA. |
| Shortcut Isolator Consumption | 8mA. |
| Dimensions (mm) | 86 x 55 x 88 mm |
| Weight | 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 |

## TFA-0165

Transparent Protection Cover



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



# 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

**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<br>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

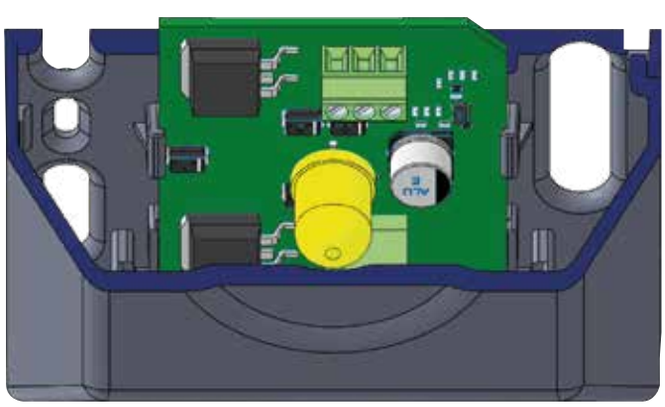
- EN54-23 and EN54-17 Certified
- Built-in Isolator
- 3 Different Flasher Mode
- 3 Different Brightness Mode
- White and Red Color Options
- Red/White, transparent UL94 non-flammable poly carbonate plastic frame

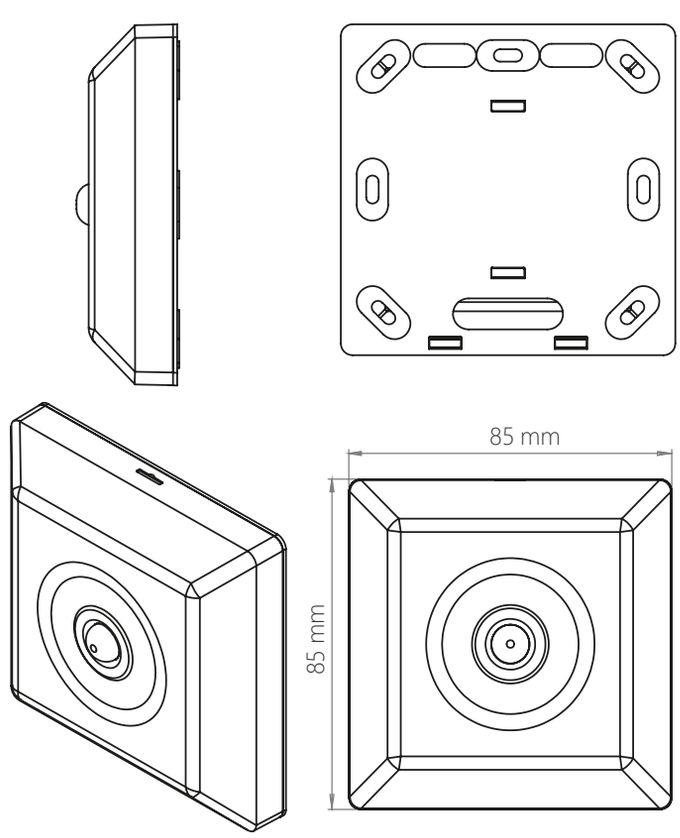
| Technical Specifications | TFS-1183W/R |
|---|---|
| Standard | EN54-23, and EN54-17 |
| Power | 15VDC – 32VDC (Norm.27VDC) |
| Average Consumption | ~90µA (@ 27VDC) |
| Alarm Consumption | Min.: 5.16mA, Norm.: 7.86mA, Max.: 11.23mA. |
| LED | 7 Wide Angle Bright LEDs |
| Flasher Coverage | W-2, 4-4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

# TFM-1990
Loop Isolator

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 |

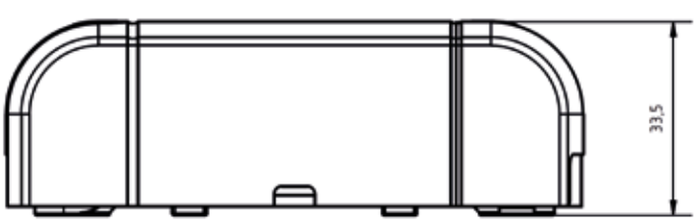
# TFM-1431

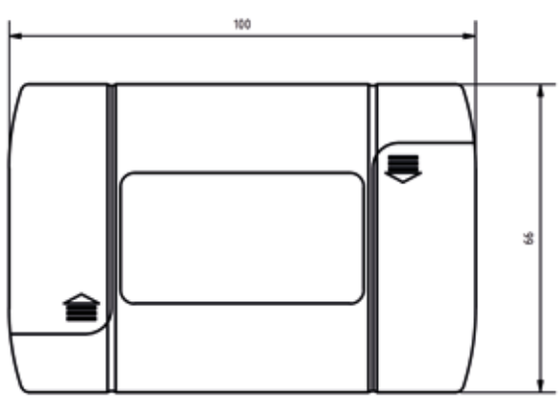
Intelligent Addressable I/O Module with Built-in Isolator

**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**

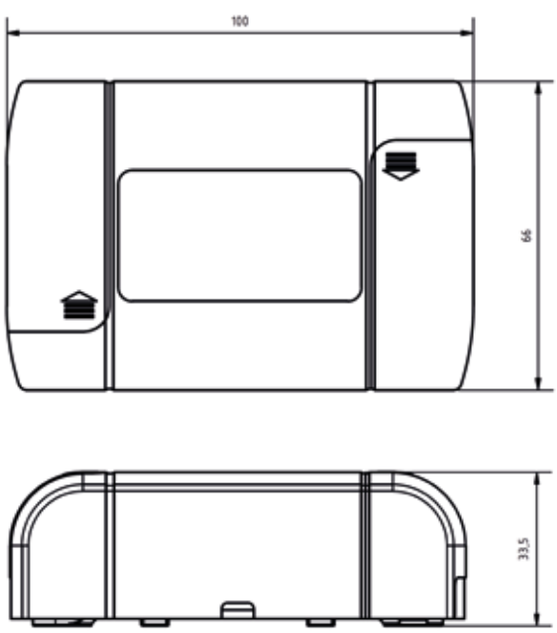
**TFM-1011** supports single monitored input and can be used with TFP-12xx series addressable fire alarm panels. The device is also supporting built-in isolator to protect the loop line against short circuit.

**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<br>1x Monitored Output<br>(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 |