

## Combined optical smoke and heat detector configurable



Configurable combined detector, can be used with analogue addressed or conventional control panels. The detector consists of two separate and independent detection sections, an optical smoke detector and a Class A1-58°, Suffix R thermal detector. The detector integrates an NFC transceiver with which, by means of a smartphone and the Tecnofire ID App, it is possible to configure the device and view: identification data, the alarm counter, the graph of the last alarm detected (optical detector only) and the data required to manage the detector review service. Maximum precision in temperature detection and analysis of smoke captured by the optical chamber. Control and dynamic compensation of optical chamber sensitivity, automatic maintenance threshold management. Programmable functions: 3 sensitivity levels, excludable prealarm signalling, excludable optical detection section, formula association and management criterion for TFBASE-SIREN or TFRIP-SMART. The functional states of the detector can be used as operands in the formulas managed by the control panel. RSC® management: programming, remote management and control. Double line isolator. Universal base mounting TFBASE01. Protection rating IP22. ABS casing. Available colours white or black.

Dimensions with mounting base (D x H) 100 x 52mm. EN 54-7:2018 - EN 54-5:2017+A1:2018 - EN 54. Certification: 0051-CPR-3133.

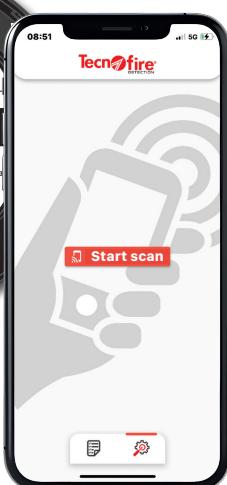
MODEL									
Name	Item no.								
TFDA-STR2		White colour							
TF3TFDASTR2BK		Black colour							

## OBLIGATIONS AND NOTICES

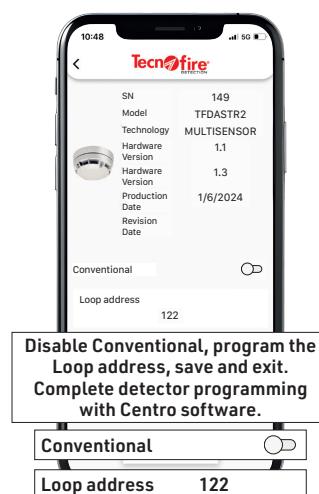
The TFDA-STR2 detector can be used with Tecnofire analogue addressable control panels and conventional control panels of any brand (subject to verification of compatibility of standby and alarm thresholds). In the planning and installation phases, the regulations in force must be observed and applied.

## DETECTOR CONFIGURATION

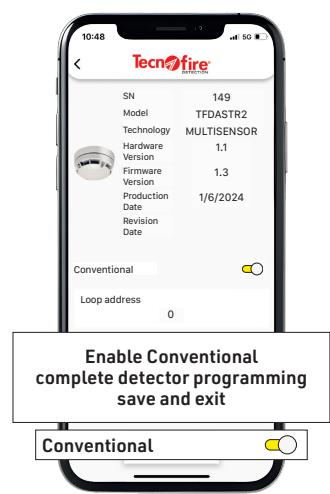
The TFDA-STR2 detector is configured with a smartphone equipped with NFC technology and the Tecnofire ID App. The configuration determines the type of detector: Addressed or Conventional. The App can only perform all NFC tag reading and writing operations if the detector is not powered.



## TFDA-STR2 Addressed



## TFDA-STR2 Conventional



## TFDA-STR2 ADDRESSED

### FUNCTIONS OF THE TECNOFIRE ID APP

The address of the detector can only be programmed with the Tecnofire ID App, the programming of the detector must be completed with the software programming Centro.

The App allows you to view all read and write operations performed on the detectors, the consultation of the list facilitates the tracking of the already assigned addresses. The detector stores a graph that depicts with a series of vertical bars, the trend of the last alarm event detected.

The alarm counter stores the number of events detected. The alarm graph and counter can be viewed by reading the detector memory with the Tecnofire ID App.

### DIAGNOSTIC FUNCTIONS

Tecnofire control units manage a set of specialised test and diagnostic functions for each type of detector.

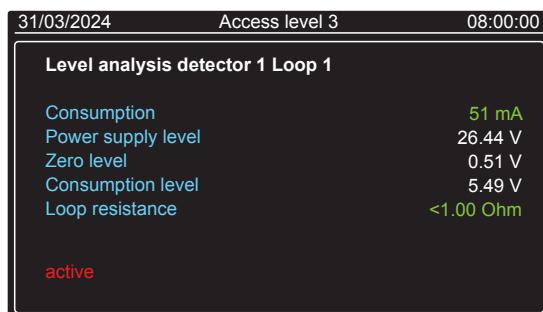
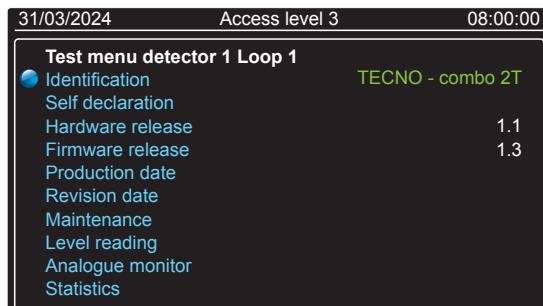
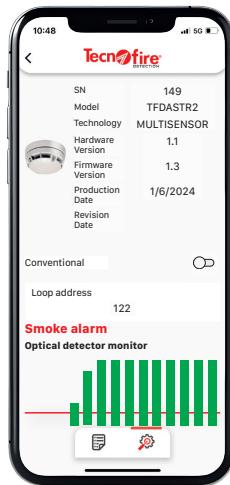
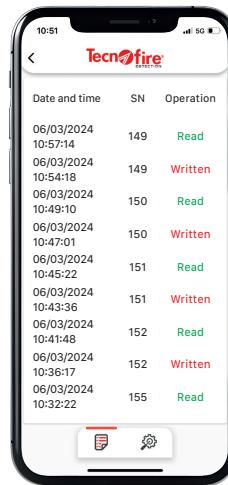
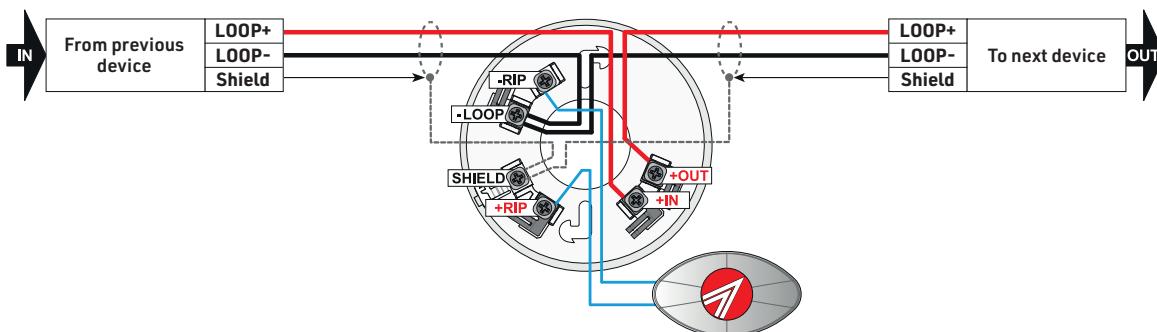
The functions available for the detector TFDA-STR2 are shown in the following table.

DIAGNOSTIC FUNCTIONS DETECTOR TECNO - combo 2T	
<b>Identification</b>	Turns on the device's LEDs for its identification
<b>Self declaration</b>	Self-declaration of the detector type
<b>Hardware release</b>	Self-declaration of the hardware version
<b>Firmware release</b>	Self-declaration of the firmware version
<b>Production date</b>	Indicates the date of manufacture of the detector
<b>Revision date</b>	Indicates the revision date of the detector
<b>Maintenance</b>	Displays the percentage of chamber saturation
<b>Level reading</b>	Detection of electrical operating values
<b>Analogue monitor</b>	View analogue monitor graph
<b>Statistics</b>	Statistical values concerning communication
<b>Activation</b>	Activates the base sounder or Smart Repeater
<b>Consumption</b>	Strings sent
<b>Power supply level</b>	Errors
<b>Zero level</b>	Percentage of success
<b>Consumption level</b>	Percentage of error
<b>Loop resistance</b>	Latency

### LOOP ISOLATOR

The detector is equipped with a line separator with double isolator. In the event of a short circuit in the Loop line, the separator intervenes by isolating the line section affected by the fault, ensuring the correct operation of the devices connected upstream and downstream. The intervention of the line separator preserves the regular operation of the loop and generates the fault signal "Separator open".

### CONNECTION TO THE LOOP



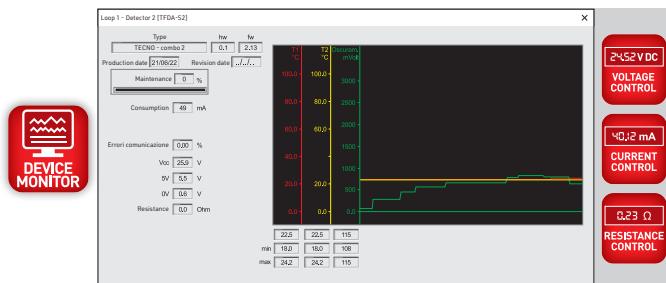
## RSC® ANALYSIS FUNCTIONS

The Centro software is equipped with analysis tools with which it is possible to monitor the functioning of the detector.

### DEVICE MONITOR

The device monitor function panel displays:

- The data identifying the detector
- The maintenance threshold of the optical chamber
- The detector consumption
- The percentage of communication errors with the control panel
- The electrical reference values of the Loop interface
- The min. and max. temperature values detected
- The obscuration values detected by the optical camera
- The graph with the dynamic trend of the detected signal.

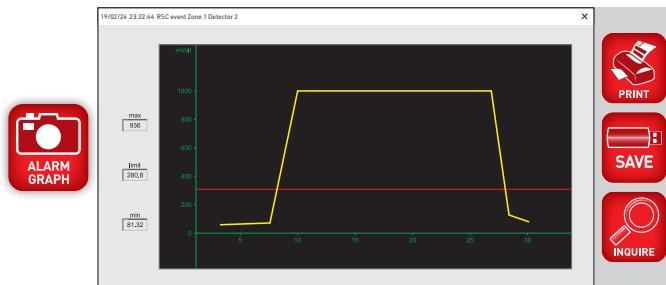


### ALARM GRAPH

The alarm detected by the optical smoke detector is digitised in graphic form and stored in the event log of the control unit.

The alarm trace photo displays, the signal trend and the reference, minimum and maximum values of the detected alarm. The analysis of the alarm trace photo allows the alarm event to be verified and investigated with objective tools.

The photos downloaded and archived by the Centro software can be saved to document the detected event.



## TFDA-STR2 CONVENTIONAL

### FUNCTIONS OF THE TECNOFIRE ID APP

The conventional detector can only be programmed with the App.

The App identifies the detector model and displays the corresponding programming fields. The TFDA-STR2 detector has three enabling and three selection fields.

The detector stores a graph depicting, with a series of vertical bars, the trend of the last alarm event detected (optical detector only).

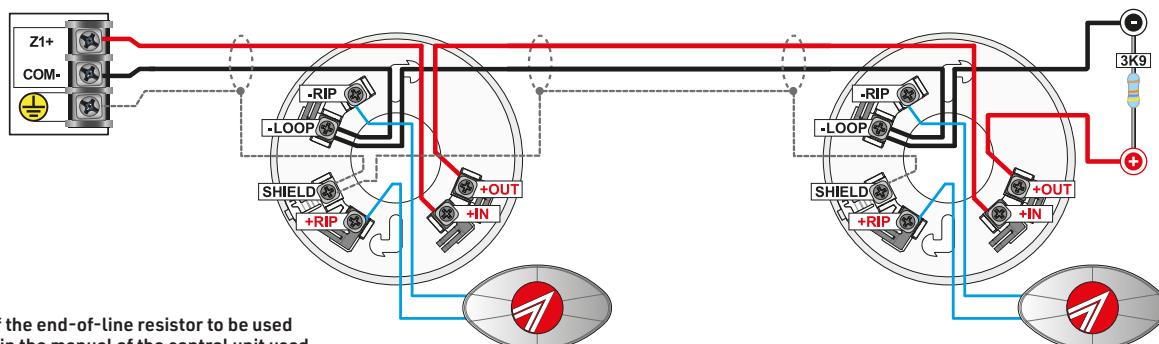
The alarm counter stores the number of detected events. The graph and alarm counter can be viewed by reading the detector memory with the Tecnofire ID app.

### SHORT-CIRCUIT ISOLATOR

The detector is equipped with a line separator with double isolator. In the event of a short circuit in the line, the separator intervenes by isolating the detector and generating the line fault.

Conventional	<input type="checkbox"/>	Enabling fields
Enable LED	<input type="checkbox"/>	
Enable optical	<input type="checkbox"/>	
Optical sensitivity		▼
MEDIUM		
LOW		
HIGH		
Thermal class		▼
CLASS A		
Thermo suffix		▼
R		
 Scan the QRCode to view the programming video tutorial.		

### CONNECTION TO THE CONVENTIONAL ZONE



## Accessories

	<b>TFRIP-R</b> Optical repeater, red LED. 360° visibility. Surface mounting. ABS casing. IP22. White colour. Dimensions (L x H x D) 78 x 45 x 25mm. Item no. TF3TFRIPR		<b>TFRIP-SMART</b> Smart optical repeater, red LED. 360° visibility. Formula-managed signaling. 3 wire connection to detector. ABS casing. IP22. Colour white. Dimensions (W x H x D) 78 x 45 x 25mm. Item no. TF3TFRIPSMART
	<b>TFBOX-B</b> Junction box for fixing a detector base. Fittings for 20mm tubes. ABS casing. White colour. Dimensions (D x H) 101 x 38mm. Item no. TF6TFBOXB		<b>TFBOX-SB / TFBOX-SBWP</b> Junction box for mounting base TFBASE01. Plugs for PG9 pipe couplings. Item no. TF5TFBOXSB (IP44) Item no. TF5TFBOXSBWP (IP65)
	<b>TFBASE01 / TFBASE01-BK</b> Mounting base. Material ABS V0. Dimensions (D x H) 100 x 19mm. Item no. TF6TFBASE01N (white) Item no. TF6TFBASE01BKN (black)		<b>TFBASE-SIREN</b> Mounting base for addressable detectors, with integrated acoustic alarm device. Polycarbonate casing. White colour. Dimensions (D x H) 108 x 52mm. Item no. TF6TFSOUNDERN
	<b>TFDA-REMOVAL</b> Tool for removing Tecnofire detectors. Articulated head to facilitate the removal and fitting of the detector. Standard telescopic pole coupling. Item no. TF3TFDAREMOVAL		<b>TFRIP-R INC</b> Optical repeater, red LED. 360° visibility. Flush mounting. Protection rating IP67. Item no. TF3TFRIPRINC

## TFDA-STR2 addressed - Technical and functional specifications

<b>General information</b>	Combined optical smoke and heat detector configurable	<b>TFDA-STR2</b>	<b>Electrical specifications</b>	Nominal voltage	<b>24V DC</b>
	Detector configuration	<b>Addressable or conventional</b>		Operating voltage	<b>18V...30V DC</b>
<b>Management App</b>	iPhone - Android	<b>Tecnofire ID</b>		Consumption	<b>400µA @ 24V DC</b>
	NFC Protocol	<b>Encrypted</b>		Consumption in alarm	<b>5mA @ 24V DC</b>
	Programming	<b>Reading / Writing</b>		Repeater output	<b>9,4V DC 3mA</b>
	Logged data	<b>Optical alarm graph Alarm counter Detector ID Revision management</b>		Operating temperature	<b>-10°C...+55°C</b>
<b>Programmable functions</b>	Polling frequency	<b>Programmable</b>	<b>Physical specifications</b>	Relative humidity (non-condensing)	<b>10%...93%</b>
	Polling signaling Led	<b>Excludable</b>		Protection class	<b>IP22 (EN 60529)</b>
	Sensibility	<b>3 levels</b>		Casing	<b>ABS</b>
	Prealarm	<b>Excludable</b>		Dimensions (H x D)	<b>100 x 52mm</b>
	Optical detection section	<b>Excludable</b>	<b>Conformity</b>	Weight	<b>100g</b>
	Thermovelocimetric detector	<b>Category A1-58° Suffix R</b>		Standards	<b>EN 54-5:2017 + A1:2018 EN 54-7:2018 EN 54-17:2005</b>
	Formula association	<b>Programmable</b>		System Compatibility	<b>EN 54-13:2020</b>
	Operating criterion	<b>Programmable</b>		Certification number	<b>0051-CPR-3133</b>
<b>Loop interface</b>	Addressing	<b>Software</b>		Year of CE marking	<b>23</b>
	Communication protocol	<b>FIRE-SPEED</b>		Number of declaration of performance	<b>053_TFDA-STR2</b>
	Loop isolator	<b>Double insulator</b>		Notified body	<b>IMQ</b>

N.B. Declarations of conformity and performance are available on [www.tecnofiredetection.com](http://www.tecnofiredetection.com)



**Tecnofire**  
DETECTION

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The product features can be subject to change without notice.