













## Addressable linear optical detectors

Linear optical smoke detection systems, with point-to-point or reflection operating mode.

The Tecnofire TFMIID-120 linear optical detection system is equipped with an automatic servo-assisted **OAS** (Optical Alignment System), managed by the alignment menu of the Tecnofire control panels.

DETECTION AND ALIGNMENT TECHNIQUE	
	<b>Linear optical detectors with adjusted reflection</b> Detector composed of two active units: a transceiver unit is a unit of reflection and telemetry. During the automatic alignment procedure, the telemetry unit transmits the alignment coordinates to the transceiver unit, the transceiver unit controls and adjusts the necessary transmission power.
	<b>Linear optical detectors with reflection</b> Detector consisting of two units: an active unit that contains the transmitter and receiver and a passive unit that is the reflection panel. The active unit transmits and receives the reflected infrared light beam from the reflection panel. Some models are equipped with auxiliary devices for optical alignment.
	<b>Point-to-point linear optical detectors</b> Detector consisting of two active units: a transmitting unit and a receiving unit. The infrared light beam is transmitted from the transmitter to the receiver. Some models are equipped with auxiliary devices for optical alignment.

<b>TFMIID-120</b>	       
	<p>Addressable smoke detection system, linear optical reflection type. Optical attenuation detection technology of the reflected infrared beam. The TFMIID-120 detector is equipped with an OAS (Optical Alignment System) automatic servo-assisted alignment system, covered by an international patent. System composed of two devices, the detection and control panel and the reflection and telemetry unit.</p> <p>Optical range 8...50m, extendable to 120m with optional additional reflector TFMIID120-LRK. Automatic compensation for optical deterioration due to dust deposits. Excellent tolerance to vibration disturbances. High false alarm immunity. Programmable functions: prealarm and alarm signal thresholds, alarm and fault signal delays.</p> <p>Advanced management with adaptive detection logic, day/night mode, determined by formulas, which dynamically relate the operating statuses of the system devices.</p> <p>Fully automatic alignment managed remotely, by the control panel menu, without acting on the control and reflection units. RSC® management: programming, remote management and control. Loop connection. Dual short-circuit isolator.</p> <p>Power supply: 24V DC detection unit from external source, Lithium battery telemetry device power supply.</p> <p>Protection rating IP3x. Operating temperature -10°C...+55°C. PC-ABS casing. White colour. Dimensions (L x W x D): detection unit 198 x 262 x 98mm, reflection unit 124 x 284 x 55. Approved EN 54-12:2015 - EN 54-17:2005. Certification: 1293-CPR-0816.</p>
	<b>Item no. TF9TFMIID120</b>

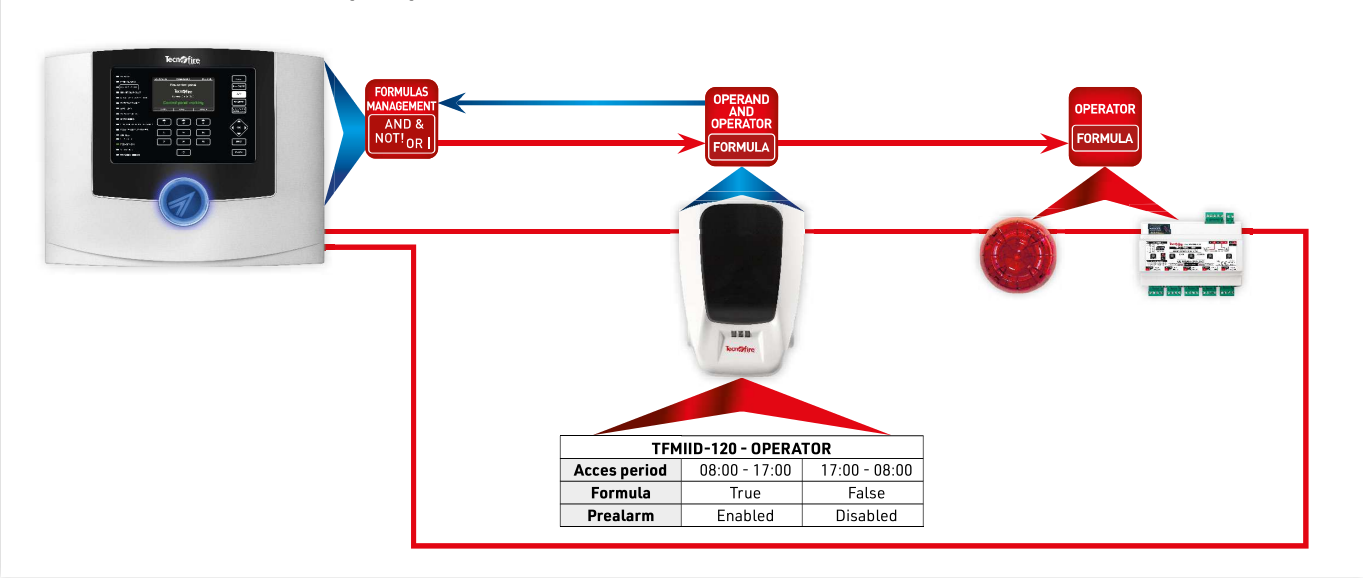
### Detector TFMIID-120 - Application scheme




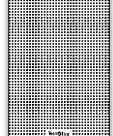


MAIN PROGRAMMING AND CONTROL PARAMETERS	
Prealarm threshold	Prealarm threshold programming: 8 levels
Alarm threshold	Alarm threshold programming: 8 levels
Alarm delay	Programming the minimum persistence time to validate alarm status: 4 levels
Fault delay	Programming the minimum persistence time to validate the fault status: 4 levels
Maintenance	Enables or disables maintenance request signaling
Wireless control	Enables or disables reporting of reflection and alignment unit faults
Criterion	It associates an operating criterion subject to verification of the associated formula
Formula	Associate a Formula. The truthfulness of the formula triggers the execution of the formula criterion

Formula applied to TFMiID-120 detector

The TFMiID-120 detector can be used in formulas as an operand and/or operator, in the example the detector is the operator of the formula and the time range and the operand. The control panel checks the formula and, depending on the result, applies the associated criteria, enables or disables the Prealarm signaling.



TFMiID - Accessories

	<b>TFMiID120-LRK</b> Range extender kit consisting of an additional reflection panel. The kit allows you to extend the optical range of the TFMiID-120 barrier from 50 to 120m. Item no. TF9TFMiID120LRK		<b>TFMiID-TEST</b> Graduated filter for the blackout test of the TFMiID-120 linear optical detector. Item no. TF9TFMiIDTEST
	<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