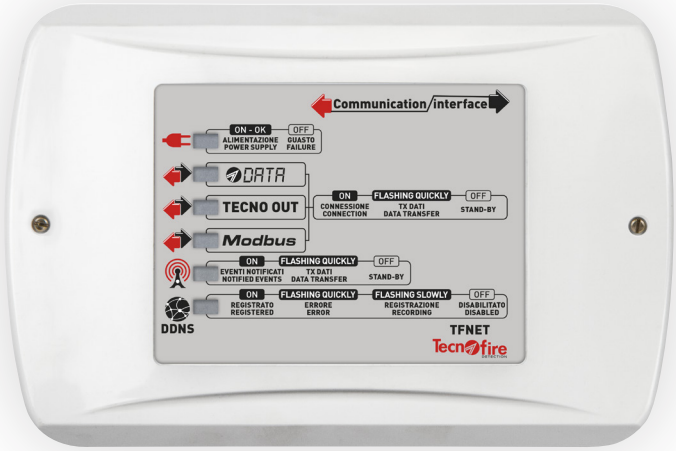
TFNET

ADDRESSABLE

Telecommunication interface



IP vector telecommunication device. 8 communicators/channels dedicated to event telematic activities and 6 TCP/IP telecommunication channels dedicated to remote control and management activities.
Integrated option for the Tecnoalarm Supervisor remote management environment.
Event notification: 33 categories of General Association, 5 categories of Specific Association to System zones.
Functional associations: 2 IP addresses for each communicator. 11 Communication protocols. Transmission formats: Data, and Email.
Security: encrypted communications, AES 128-bit and AES 256-bit supported encryptions, independent passphrase programming for each communicator. Automatic diagnostic functions: communication vector, power supply, serial call.
Front panel with 6 LED signaling operating statuses. RSC® management of the device: programming, remote management and control of all operating parameters. RS485 bus connection. Protection rating IP3x. ABS casing. White colour.
Dimensions (L x H x D) 165 x 110 x 41mm.
Standard EN 54-1

MODEL										
Name	Item no.		RSC	EN 54-1	IP	IP DATA	IP DATA	EMAIL	supervisor	ABS BOX
TFNET	TF2TFNET									

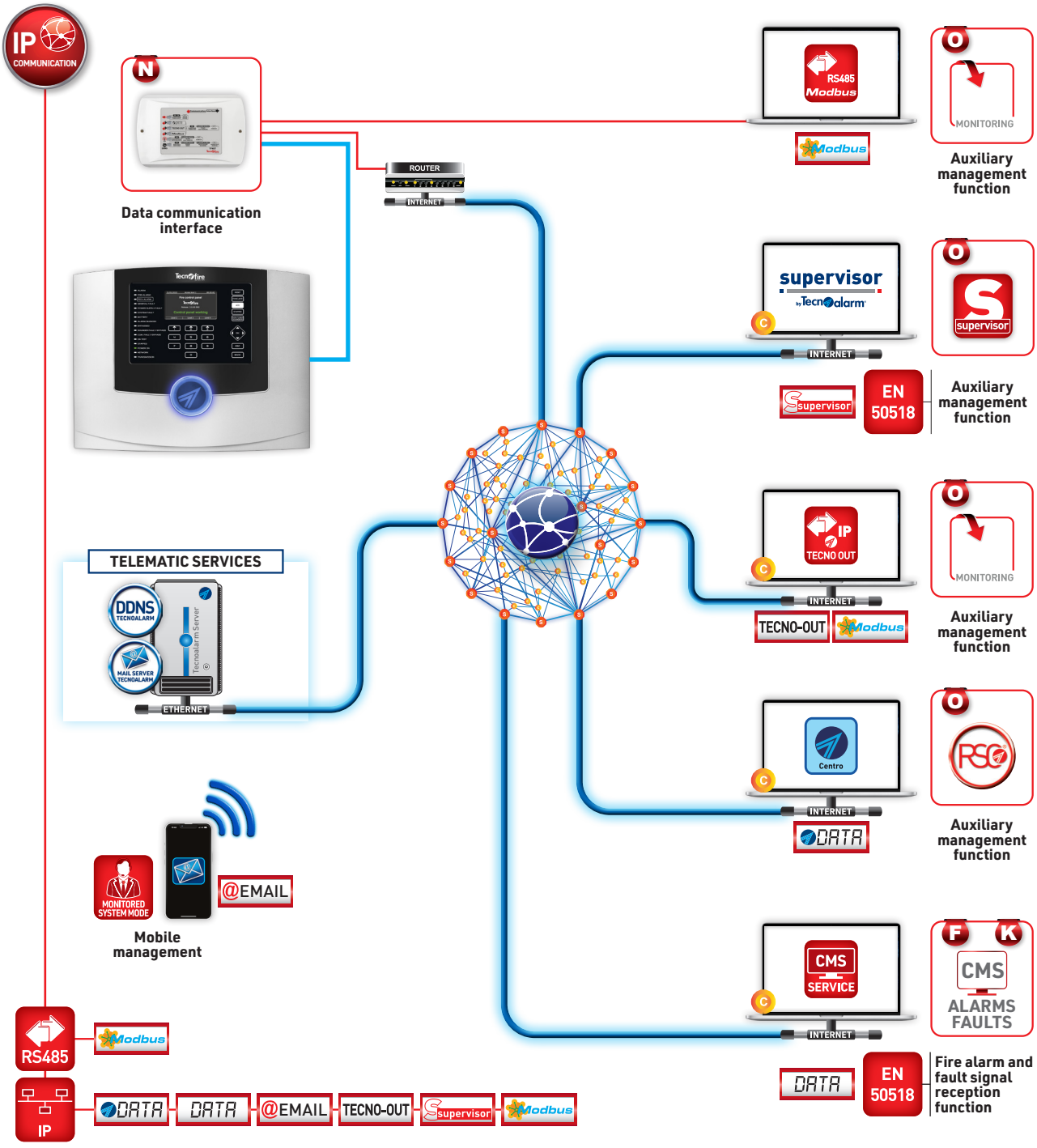
OBLIGATIONS AND WARNINGS

The TFNET communication interface has been designed and manufactured within the framework of an ISO 9001 quality management system, which provides for the application of a set of rules for the design phase and plans all subsequent testing and control activities necessary for its production.
All components used have been selected for their intended purpose, and their characteristics are ensured when the environmental conditions correspond to those indicated for class 3K5 of EN 60721-3-3:1995.The interface may only be installed indoors, in a position protected from accidental impacts, and no temperature or humidity control is required in the installation environment. For the best use of the product, all system design and installation activities must be carried out in accordance with current national regulations.

TELECOMMUNICATION INTERFACE

The TFNET telecommunication interface integrates a 10/100 Mbit Ethernet IP node that can be connected to a LAN/ WAN.
The TFNET interface integrates the management of Tecnoalarm telematic services: DDNS, SNTP, and Mail Server.
The IP communication vector expands and diversifies the event telematic capabilities of Tecnofire Systems.
Specific software options allow the TFNET interface to perform the auxiliary management function, with proprietary and third-party environments and applications. In particular, with the Tecnoalarm Supervisor management environment, the TFNET interface guarantees the most complete functional and operational integration, for the auxiliary management function of the fire detection system.

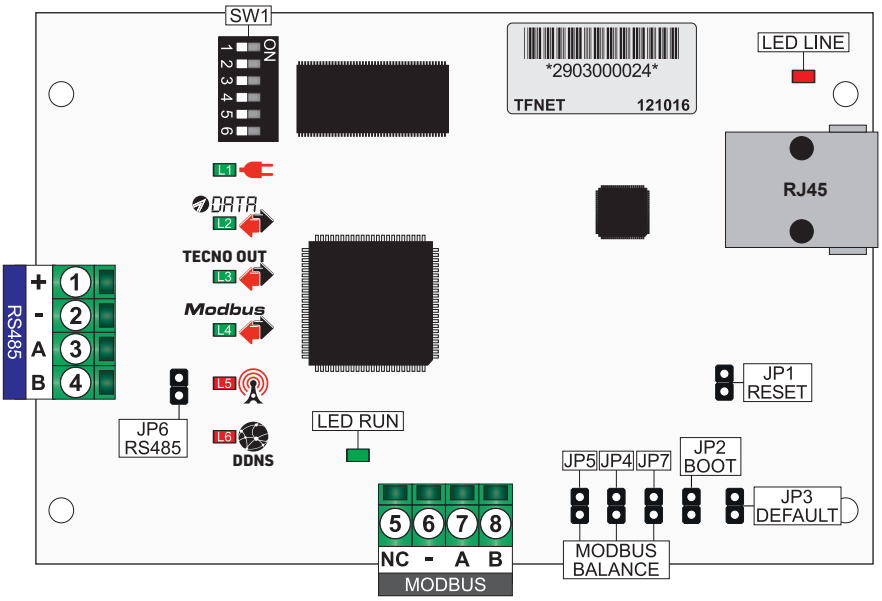
FUNCTION DIAGRAM

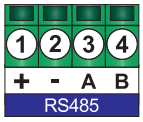


TELECOMMUNICATIONS SERVICES AND FUNCTIONS

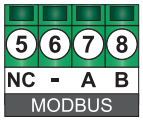
Devices	Vectors	DDNS	MAIL	Vocal	Vocal	SMS	Remote management	Supervisor	Tecno out	Modbus	CMS
TFNET	IP	✓	✓	-	-	-	✓	✓	Optional	Optional	✓

ELECTRONIC BOARD

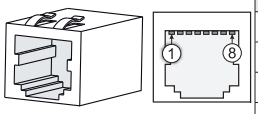




BUS RS485		
1	+	Supply positive
2	-	Supply negative
3	A	Communication channel A
4	B	Communication channel B



RS485 MODBUS BUS		
5	NC	Not connected (terminal not used)
6	-	Reference negative of RS485 BUS output
7	A	Communication channel A
8	B	Communication channel B

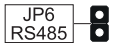


Ethernet RJ45 connector			
1	White / Green	5	White / Blue
2	Green	6	Orange
3	White / orange	7	White / Brown
4	Blue	8	Brown

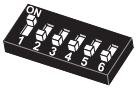
Led	Colour	Function
LED RUN	Verde	LED monitoring the functional state of the device. Flashing: normal operation state
LED LINE	Rosso	LED signalling that the device is using the Ethernet line

Identification	Condizione normale	Funzione
JP1 - RESET	Open	Hardware reset
JP2 - BOOT	Open	Used to update the fi rmware of the product (RJ45 port Ethernet connection)
JP3 - DEFAULT	Open	No function (reserved for future developments)

Identification		MODBUS BUS balance			
JP4	MODBUS BALANCE	Open	RS485 MODBUS line not terminated	Closed	RS485 MODBUS line terminated
JP5		Open		Closed	
JP7		Open		Closed	



Jumper JP6 - Termination of RS485 serial line	
Open	With the jumper open, the Bus is not terminated. Open the jumper when the device is not the last device connected on the Bus. Condition valid for both wiring confi gurations of the line Bus: open or closed.
Closed	With the jumper closed, the Bus is terminated. Close the jumper when the device is the last device connected on the Bus. Of course only if the connection Bus is in open line confi guration.



SW1 Serial address setup													
Address	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6	Address	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
0	OFF	OFF	OFF	OFF	OFF	OFF	9	ON	OFF	OFF	ON	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	10	OFF	ON	OFF	ON	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	11	ON	ON	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	12	OFF	OFF	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	13	ON	OFF	ON	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	14	OFF	ON	ON	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	15	ON	ON	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	16	OFF	OFF	OFF	OFF	ON	OFF
8	OFF	OFF	OFF	ON	OFF	OFF							

Notes: setting address 0 disables the operation of the communicator. Accepted addresses range from 1 to 16.
All other logic combinations are reserved.

TFNET

SOFTWARE PLUG-INS

TFABIL-MODBUS	Enables the TFNET to manage the ModBus communication protocol. For the MODBUS protocol, the TFNET uses either the RS485 communication ports and/or the LAN/WAN port.	IP Modbus RS485 Modbus
	Item no. TF2TFABILMODBUS	
TFABIL-TECNO	Enables the TFNET to manage the TECNO OUT communication protocol. For the TECNO OUT protocol, the TFNET uses the LAN/WAN communication port.	IP TECNO OUT
	Item no. TF2TFABILTECNO	
TFABIL-FAT FBF	Enables the TFNET to manage the FAT and FBF4000 communication protocols. For both protocols, the TFNET uses the RS485 communication port.	RS485 FAT RS485 FBF4000
	Item no. TF2TFABILFATFBF	

Technical and functional specifications

General information	Communication interface	**TFNET**
	Communication protocols	**FIRE-BUS**
	Addressing	**Dip-switch**
	Connection	**Bus RS485**
TLC features	Telecommunications vector	**IP**
	Telecommunication channels	**8**
	IP addresses	**2 for each channel**
	Report codes	**33 categories**
	Report codes Zones	**5 typology**
	Communication protocols	**11**
	Call event queue	**64**
	Encryption	**AES 128/256 bit**
	Passphrase	**Programmable**
	TCP/IP Server channels	**Server 1 Server 2 Tecnoserver Tecnoalarm Service Tecnoalarm Tecno out Modbus**
Advanced management	Integrated enabling	**Supervisor**
	Optionals software plug-in	**Tecno out ModBus FAT FBF4000**
Telematic services	Managed Services	**DDNS Tecnoalarm Mail Server Tecnoalarm SNTP**

Automated managements	Cyclic communication test	**Programmabile**
ModBus	Management interfaces	**RS485 Ethernet port**
	TCP/IP protocols	**TCP RTU TCP ASCII TCP**
	RS485 protocols	**RTU485 ASCII485**
	RS485 parameters	**Programmables**
	LAN address	**Programmable**
Electrical specifications	Power supply	**From serial Bus**
	Nominal voltage	**24V DC**
	Operating voltage	**20V...27.6V DC**
	Consumption in stand-by	**90mA @ 24V DC**
	Maximum consumption	**140mA @ 24V DC**
Physical specificatons	Environmental class	**3K5 EN 60721-3-3:1995**
	Operating temperature	**-5°C...+40°C**
	Relative humidity (without condensation)	**10%...93%**
	Protection class	**IP3x**
	Casing	**ABS**
	Dimensions (L x H x D)	**165 x 110 x 41mm**
	Weight	**200g**
Conformity	System compatibility	**EN 54-13:2020**
	Reference standard	**EN 54-1**

N.B. Declarations of conformity and performance are available on www.tecnofiredetection.com

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