

# FPE-8000-FMR Remote keypad AVENAR keypad 8000



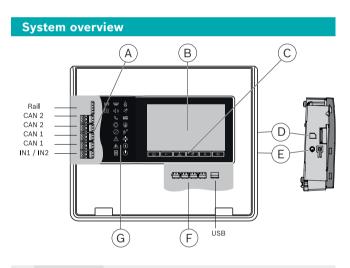
The remote keypad allows decentralized operation of a fire safety system. The design of the graphical user interface is identical to the fire panels. A color display shows all messages. The touch screen is for operation of a specific panel or the entire system. The user-friendly interface adapts to various situations. This causes correct operation that is simple and clear as well as targeted and intuitive. Panels and keypads of the AVENAR series can be combined in one panel network using the Ethernet and the CAN bus interfaces.

In combination with an AVENAR panel 8000, the keypad can be used as a redundant panel controller. In this case, it cannot be used as a remote keypad. Power can be supplied by the panel and/or an external power supply unit.

The housing of the remote keypad is designed for proper and clean installation at highly visible locations. It allows tilted installation and surface or flush wall mounting without requiring additional installation frames.

The AVENAR keypad is configured on a laptop using the FSP-5000-RPS programming software. The programming software enables further adaptation, e.g. to country-specific requirements and regulations.

- User interface identical to fire panel
- High resolution display with bright colors to indicate alarms and events
- 8" touch pad with fixed and programmable buttons, thus adaptable to the situation
- Clean design for surface and flush mounting
- Alternative use as redundant panel controller



Pos	Designation	Function
A	Interfaces	Power supply input, panel networking and inputs for internal device monitoring
В	Touchscreen	Operating the networked system through virtual but- tons and variable display windows
С	6 fixed buttons	Standard entries
D	Memory card slot	Memory card reader for maintenance services
E	Power button	Shutdown and restart of the device
F	Ethernet ports	Panel networking and interface to various systems
G	18 LEDs	Indicating the operating status

#### **Functions**

#### **Alarm indication**

All messages are shown on the display with a bright color. The displayed messages contain the following information:

- Message type
- Type of the triggering element
- Description of the exact location of the triggering element
- Logical zone and sub-address of the triggering element

18 Icon LEDs give continuous information about the operating status of the panel or the system. A red icon LED shows an alarm. A blinking yellow icon LED shows a fault. A steady yellow icon LED shows a disabled function. A green icon LED shows proper operation.

Two status LEDs, one red and one yellow, are programmable. The red one shows a self-defined alarm. The yellow one shows a self-defined fault or deactivation.

Additional annunciator modules, each with 16 red and 16 yellow LEDs are available to indicate a larger number of self-defined alarms, faults or deactivations.

#### **Operation and processing of messages**

For operating the panel, an 8 inch touch pad as input medium is put upon the display. There are 6 buttons with fixed functionality as well as 3 programmable function keys.

Examples for the assignment of the function keys:

- Set the panel controller to day mode, set the panel controller to night mode
- Enable/disable detectors, inputs, or outputs
- Set standard sensor sensitivity, set alternative sensor sensitivity

Each function key has a virtual status indicator. At any time, an operator with sufficient user rights can control the function keys.

#### **Overview of evacuation zones and outputs**

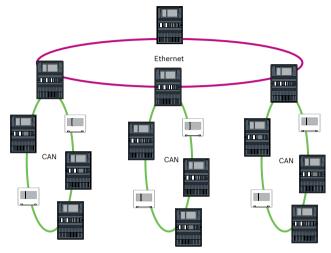
At any time, the operator can get a clear overview of each evacuation zone and of each output connected to the fire protection equipment. Each zone and each output is marked with a programmable text label and a clearly distinctive color reflecting the state: Green shows idle state, power is available. Red shows an activation during fire alarm condition, and fuchsia an activation without a fire alarm condition. Yellow shows a fault or disabled state. An operator with sufficient user rights is able to start the evacuation in selected zones and activate outputs connected to the fire protection equipment through the user interface.

#### Networking

A keypad can be networked with up to 32 panel controllers, remote keypads, and servers.

Panels and keypads display all messages, or you can form a group of panels and keypads. Within one group, only messages of this group are displayed. A variety of fire alarm network topologies are possible:

- CAN loop
- Ethernet loop
- Ethernet/CAN double loop
- CAN loop with Ethernet segments
- Ethernet backbone with sub-loops (Ethernet/CAN)



#### Languages

The operator can change the language of the user interface. A quick user guide for each language is available. Following languages are included in the package: English, German, Bulgarian, Croatian, Czech, Danish, Dutch, Estonian, French, Greek, Hungarian, Italian, Latvian, Lithuanian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish and Turkish. The quick user guides of following languages are available only online at <u>www.boschsecurity.com</u>: Hebrew and Ukrainian.

#### **Operator management**

The system can have up to 200 different registered operators. Login is permitted with a user ID and an 8-digit pin code.

There are four different authorization levels. Depending on the authorization level it is possible for the operator to do certain functions according to EN54-2.

#### Power supply

Power can be supplied by a fire panel and/or an external power supply unit FPP-5000 (F.01U.511.307). For applications requiring functional integrity, a redundant power supply input is available. When the primary power supply fails, the redundant power supply can take over.

#### Use as redundant panel controller

In combination with an AVENAR panel 8000, standard or premium license, an AVENAR keypad 8000 can be used as a redundant panel controller. Only in this case the rail connector is needed.

In case it is used as redundant panel controller, the keypad has to be installed adjacent to the panel. Use cable FPE-8000-CRK (F.01U.349.392) for connection to panel rail. In normal operation, the user interface is switched off until the main controller fails.

#### Interfaces

The remote keypad features:

- 2 CAN interfaces (CAN1/CAN2) for networking
- 1 Rail connector (for redundancy only)
- 4 Ethernet interfaces (1 / 2 / 3 / 4) for networking, prescribed usage:
  - 1 and 2 (blue): Panel network
  - 3 (green): Building management system, hierarchy panel
  - 4 (red): Remote Services
- 2 signal inputs (IN1/IN2)
- 1 USB host interface for configuration via FSP-5000-RPS
- 1 Memory card interface
- 2 Power supply connectors (DC1/DC2)

#### **Regulatory information**

Region	Regulatory	compliance/quality marks
Europe	CE	AVENAR panel 8000   AVENAR keypad 8000
Germany	VdS	G 220049 AVENAR keypad 8000
	VdS-S	S 221001 VdS-S_S221001_AVENAR series
Belgium	BOSEC	B - 9174 - FD - 894
Switzerland	VKF	AEAI 31626 AVENAR panel 8000   AVENAR panel 2000   AVENAR keypad 8000
Czech Republic	TZÚS	080-023743 AVENAR panel 8000   AVENAR panel 2000   AVENAR keypad 8000
Israel	SII	7152327298 AVENAR keypad 8000
Morocco	CMIM	AVENAR panel 8000   AVENAR keypad 8000
Macao Special Administrative Region Govern- ment	СВ	2069/GEL/DPI/2023
Malaysia	BOMBA	23-340 AVENAR panel 8000   AVENAR keypad 8000

Region	Regulatory compliance/quality marks		
	BOMBA	23-341 AVENAR panel 2000   AVENAR keypad 8000	
Poland	CNBOP	4374/2021 FPE-8000-FMR	
	CNBOP	63-UWB-0357 FPE-8000-FMR	
Serbia	KVALITET	AVENAR keypad 8000	
Sweden	INTYG	23-100 AVENAR keypad 8000	
Slovakia	PHZ	2021002517-2 AVENAR panel 8000   AVENAR panel 2000   AVENAR keypad 8000	
Ukraine	DCS	0000957-20 AVENAR panel 8000   AVENAR keypad 8000	

#### Installation/configuration notes

- As stipulated by EN 54-2, panels with more than 512 detectors and alarm points must be equipped with a redundant panel controller. Combined with an AVENAR panel 8000, an AVENAR keypad 8000 can be used as a redundant panel controller.
- The FSP-5000-RPS programming software enables adaption to project- and country-specific requirements.

The programming software and the associated documentation can be found at

www.boschsecurity.com for those with access rights.

Information about the programming software is also included in FSP-5000-RPS online help.

#### Panel controller firmware

Two firmware versions are available for the panel controller of the fire panel: version 3.x and version 4.x.

Firmware V3.x enables networking compatibility with the legacy FPA-5000 series panels (MPC-xxxx-B and MPC-xxxx-C) and the FMR-5000 keypad.

This implies that when AVENAR panel and AVENAR keypad are running firmware V3.x, they only contain bound product features and peripherals that are also available for the FPA-5000 series.

From January 1, 2022 to December 31, 2025, panel firmware version 3.x is in maintenance mode. During this period, new versions will be released only containing fixes for critical bugs and critical security gaps.

From January 1, 2022 onwards, new product features, new LSN peripherals, new GUI languages, and normative changes will be only available in firmware version 4.x.

Firmware version 4.x is exclusively for AVENAR panel and AVENAR keypad.

### Parts included

Quantity	Component
1	FPE-8000-FMR Remote keypad
1	Product label
4	Screw, dowel

# **Technical specifications**

### Electrical

Minimum operating voltage (VDC)	13.2
Maximum operating voltage (VDC)	30
Current consumption (mA at 20 VDC)	230 mA – 510 mA (standby - alarm)
Maximum power loss (W)	13
Max. CAN cable length in networks	Lmax = 1000 m, depending on config- uration, cable type and topology
Max. line resistance, DC1 ( $\Omega$ )	6
Max. line resistance, DC2 ( $\Omega$ )	6

### Mechanical

Housing material	Polycarbonate (PC)
Color	RAL9003, signal white (painted)
Weight (kg)	2.8
Dimensions H x W x D (mm)	280.1 x 339 x 80.2
Flammability rating	UL94-V0
LCD display (pixels)	7" color WVGA 800 x 480
Operating and display elements	<ul><li>6 keys</li><li>18 LEDs</li></ul>
Interfaces	CAN1, CAN2, ETH1, ETH2, ETH3, ETH4, USB, Rail
Signal inputs	IN1, IN2
Power supply	DC1, DC2

# Environmental

Protection class as per EN 60529	IP 30
Permissible operating temperature (°C)	-5 to +50
Relative humidity at 25°C (%)	≤95 (non-condensing)

# Ordering information

### FPE-8000-FMR Remote keypad

Remote operating panel for performing the same operating procedures as the control panel, enabling variable operation of a networked system. In combination with an AVENAR panel 8000, standard or premium license, an AVENAR keypad 8000 can be used as a redundant panel controller. Only in this case the rail connector is needed. Order number **FPE-8000-FMR** 

# Accessories

#### **FPE-8000-CRK Cable redundant keypad** Used to redundantly connect one remote keypad to a panel controller.

Order number FPE-8000-CRK



https://www.boschsecurity.com