Panel controller FPE-8000-SPC/PPC

- High resolution display with bright colors to indicate alarms and events
- 8" touch pad with fixed and programmable buttons, thus adaptable to the situation
- Integrated Ethernet switch for networking and interfaces to remote services, building management and voice alarm systems
- Adaptable to local requirements and regulations
- User interface and printed short user guide in 24 national languages

The panel controller is the central component of the fire panel. All messages are shown on the color display. The entire system is operated via a touch screen. The user-friendly user interface adapts to various situations. This allows correct operation that is both simple and clear as well as targeted and intuitive.
The FSP-5000-RPS programming software enables adaption to project- and country-specific requirements.

System overview

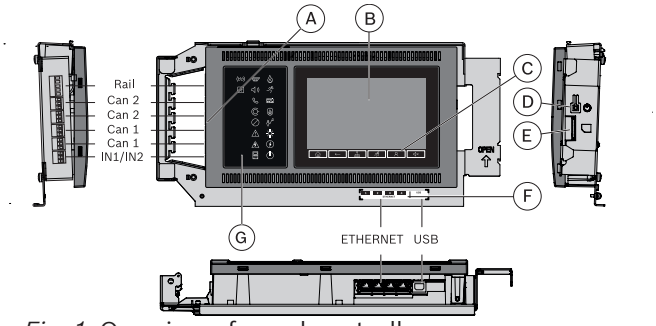

Fig. 1: Overview of panel controller

Pos.	Designation	Function
A	Interfaces	Panel networking and inputs for internal device monitoring
B	Touchscreen	Operating the networked system through virtual buttons and variable display windows
C	6 fixed buttons	Standard entries
D	Power button	Shutdown and restart of the device
E	Memory card slot	Memory card reader for maintenance services
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 detection points or outputs, disable detection points 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.

Saving and printing messages

The history log keeps incoming alarms and events internally. The history log has a capacity to store 10000 messages. The messages can be shown on the display, and you can export the messages.
Additionally, you can connect a log printer via a serial interface module for real-time printing incoming messages.

Networking

Up to 32 panel controllers, remote keypads and OPC servers can be combined to form a network.
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 printed quick user guide for each language is supplied with the package. Following languages are included: 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.

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.

Interfaces

The panel controller features

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

Licenses

The panel controller is delivered with a hard coded software license. This software license is implemented during production and cannot be modified, revoked or transported. The license defines the maximum panel network size and availability of certain features and interfaces.

	Standard license FPE-8000-SPC	Premium license FPE-8000-PPC
Ethernet interface to		
Building management system (OPC server, BIS, FSM-5000-FSI)		•
UGM-2040 Hierarchy panel		•
Voice alarm system (Smart Safety Link)		•
Monitoring and control		
Status overview	•	•
Simultaneous control	•	•
Individual control		•
Modularity (maximum number)		
Slots for functional modules (max number including slots for LSN modules)	46	46
LSN modules (max number)		
LSN 0300 A modules (1 slot per module)	32	32
LSN 1500 A modules (2 slots per module)	11	11
Panel redundancy		
Redundant panel controller	•	•
Keypad as redundant panel controller	•	•
Network		
Panel network	panels, remote keypads	panels, remote keypads, servers
Max. number of nodes	32	32

Certifications and approvals

Region	Regulatory compliance/quality marks	
Europe	CPR	0786-CPR-21699 AVENAR panel 8000
Germany	VdS	G 220047 AVENAR panel 8000

Installation/configuration notes

- As stipulated by EN 54-2, panels with more than 512 detectors and manual call 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.

Technical specifications

Electrical

Current consumption (mA at 24 VDC)	• standby: 170 • alarm: 400
Maximum power loss (W)	10
Max. CAN cable length in networks	Lmax = 1000 m, depending on configuration, cable type and topology

Ethernet interface

Maximum copper cable length	100 m
Maximum fiber optic cable length	2km (MM) up to 40 km (SM)

Mechanical

Housing material	Polycarbonate (PC)
Color	RAL7016, Anthracite
Weight (kg)	2.4
Dimensions H x W x D (mm)	190 x 404 x 60
Flammability rating	UL94-V0
LCD display (pixels)	7" color WVGA 800 x 480
Operating and display elements	• 6 keys • 18 LEDs
Interfaces	CAN1, CAN2, ETH1, ETH2, ETH3, ETH4, USB , Rail
Signal inputs	IN1/IN2

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-SPC Panel controller, standard license
central component of AVENAR panel 8000, which is delivered with standard license defining network size, as well as fire detection features according the standards. The entire system is operated via a touchscreen, all messages are shown on the color display. The user-friendly user interface adapts to various requirements.
Order number **FPE-8000-SPC | F.01U.327.090**

FPE-8000-PPC Panel controller, premium license
central component of AVENAR panel 8000, which is delivered with premium license. In addition to network capability and network size, as well as fire detection features according the standards, the premium license provides interfaces for OPC, FSM-5000-FSI, UGM-2040, Smart Safety Link. Individual control of evacuation zones and fire controls is provided. The entire system is operated via a touchscreen, all messages are shown on the color display. The user-friendly user interface adapts to various requirements.
Order number **FPE-8000-PPC | F.01U.352.441**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
Bosch Security Systems, LLC
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia