Панели

AutroSafe 4

Технические характеристики

Архангельск (8182)63-90-72 Астана +7(7172)727-132 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04

Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-<u>16</u> Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15

Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93



FIRE ALARM CONTROL PANEL BS-420

AutroSafe Interactive Fire Detection System Product Datasheet

Features

- SelfVerify function for automatic testing of detectors
- · Automatic addressing of detectors
- AutroFieldBus
- Accommodates up to a maximum of 12 modules, of which maximum 6 can be Loop Driver Modules
- User-friendly display and operator controls
- Backlit operational buttons. Text display suitable for full darkness operation
- Surface mounting on wall
- Rack mounting in standard 19" cabinets
- Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements,
- CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)

Description / Application

BS-420 is a complete fire alarm control panel with full operation capabilities. The panel serves as an operating panel for one or several defined operation zones. All alarm handling and system features can be controlled and monitored from the panel.

The panel can accommodate up to a maximum of 12 modules. The system offers Loop Driver Modules for detection loops and several types of I/O modules (see Optional Modules below).

There can be a maximum of 6 Loop Driver Modules in each panel. All modules are easily plugged onto each other on a standard mounting rail inside the unit.

The panel provides connections for 2 Ethernet ports and 2 USB host ports.

The panel is menu operated on a 16-line display, with 40 characters per line. A built-in printer is available as an option. The panel communicates with other system units on the Ethernet-based local area network, AutroNet.



Optional Modules

- Loop Driver Module (BSD-310/311) for connection of detection loops
- Output Module (BSB-310) with 4 monitored outputs
- Output Module (BSJ-310) with 8 open collector non-monitored outputs
- Input Module (BSE-310) with 4 monitored inputs
- Input Module (BSE-320) with 8 non-monitored inputs (galvanically isolated)

Indicators

- 16 x 40-character alphanumeric display
- Fire, More Events, Fire Brig. Signalled, Fault,
 Function Disabled, Testing, System Fault, Power,
 Function Delayed, Alarms Fault, Fire Brig. Fault,
 Alarms Disabled, Fire Brig. Disabled, Detector
 Inhibit, Extinguishing Activated, Extinguishing
 Isolated, Local Mode, Dual Safety Stdby, MultiS
 SmokeDis.
- Internal buzzer

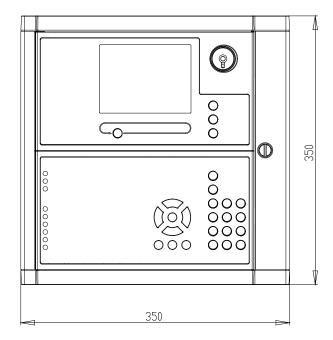


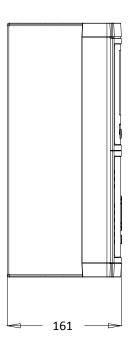
Operator Controls

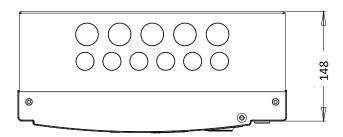
- More Events, Mute Panel, Silence Alarms, Reset System, Menu, Close Window
- Keyboard with alphanumeric characters and scroll function
- Separate buttons for menu operation
- Backlit buttons and text

Capacity

- 64 system units (panels) on the local area network; AutroNet
- 15000 loop units per system
- 12 modules per fire alarm control panel, of which 6 can be Loop Driver Modules
- 512 detectors and manual call points can be connected to each Fire Alarm Control Panel (EN 54)
- 31 AutroFieldBus units connected to AutroFieldBus
- 127 loop units connected to one detection loop
- 40 socket/loop sounders connected to one detection loop
- 15 loop units connected to one Powerloop







Product Name	Part number	Description
BS-420	116-BS-420	Fire alarm control panel

Technical specifications	
Dimensions (mm)	350 x 350 x 161
Cut-Out Dimensions (mm)	320 x 330 x 140
Weight (kg)	8,5 kg
Materials	Steel cabinet, ABS/PC moulded front
Mounting	Surface or flush mounting
Protection class	IEC-529 / IP32
Operating Temperature	-15°C to +70°C
Storage Temperature	-40°C to +70°C
Power supply	Nom. 27,2 VDC (18-32 VDC)
Current consumption	156 mA/27,2 VDC (idle) Max. 340 mA/27,2 VDC (lamp test)
Capacity – Loop Driver Modules and I/O Modules	Maximum 12 modules (A combination of BSD-310, BSB-310, BSE-310/320 and BSJ-310)
Capacity – Loop Driver Module	Maximum 6 BSD-310/BSD-311. The maximum number of detectors and manual call points that can be connected to these 6 modules are 512 (refer to EN 54). Maximum 127 detectors/manual call-points/electronic sounders/ I/O units on each detection loop.
Detector connection	By use of BSD-310/ BSD-311
Inputs	By use of BSE-310 and BSE-320
Outputs	By use of BSB-310 and BSJ-310
Communication	AutroNet (Ethernet-based local area network)
Communication Ports	 2 Ethernet ports 2 USB host ports (max. 100mA) 1 serial port for the std. detection loop communication protocol 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom /ESPA4.4.4/MODBUS/VDR) 1 AutroFieldBus (AFB) interface 1 RS-485 serial port for communication with the front panel FailSafe relay output
Ethernet Cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes

OPERATOR PANEL BS-430

AutroSafe Interactive Fire Detection System, Release 4
Product Datasheet

Features

- SelfVerify function for automatic testing of detectors
- Automatic addressing of detectors
- User-friendly display and operator controls
- Backlit operational buttons. Text display suitable for full darkness operation
- · Surface mounting on wall or flush mounting in wall
- Rack mounting in standard 19" cabinets and flush mounting in consoles
- Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements, CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)



BS-430 serves as an operating panel for one or several defined *operation* zones.

All alarm handling and system features can be controlled and monitored from the panel. A restricted scope of operation may be configured.

The panel communicates with controllers and the entire system via the Ethernet-based local area network; AutroNet.

The panel is menu operated on a 16-line display, with 40 characters per line.

Indicators

- 16 x 40-character alphanumeric display
- Fire, More Events, Fire Brig. Signalled, Fault, Function
 Disabled, Testing, System Fault, Power, Function Delayed,
 Alarms Fault, Fire Brig. Fault, Alarms Disabled, Fire Brig.
 Disabled, Detector Inhibit, Extinguishing Activated,
 Extinguishing Isolated, Local Mode, Dual Safety Stdby,
 MultiS SmokeDis
- Internal buzzer

Operator Controls

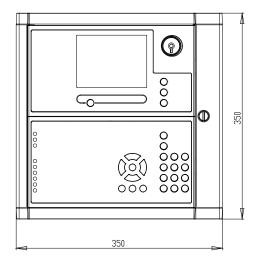
- More Events, Mute Panel, Silence Alarms, Reset System, Menu, Close Window
- Keyboard with alphanumeric characters and scroll function
- Separate buttons for menu operation (manoeuvre buttons)
- Backlit buttons and text

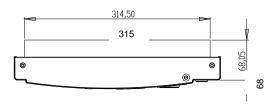


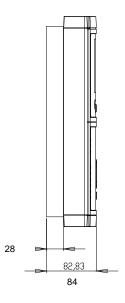


Technical specificat	ions	
Dimensions (mm)	350x350x84	
Cut-Out Dimensions (mm)	320x290x84	
Weight	3,4 kg	
Materials	Steel cabinet, ABS/PC moulded front	
Mounting	Surface or flush mounting	
Protection class	IEC-529 / IP32	
Operating Temperature	-15°C to +70°C	
Storage Temperature	-40°C to +70°C	
Power supply	Nom. 27,2V DC (18-32V DC)	
Current Consumption	175mA/27,2V DC (idle) Max. 340mA/27,2V DC (lamp test)	
Communication	AutroNet (Ethernet-based local area network)	
Communication Ports	 2 Ethernet ports 2 USB host ports (max. 100mA) 1 serial port for the std. detection loop communication protocol 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom /ESPA4.4.4/MODBUS/VDR) 1 AutroFieldBus (AFB) interface 1 RS-485 serial port for communication with the front panel FailSafe relay output 	
Ethernet Cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes	

Product Name	Description
BS-430	Operator Panel







CONTROLLER BC-420

AutroSafe Interactive Fire Detection System, Release 4 Product Datasheet

Features

- Accommodates up to a maximum of 12 modules, of which maximum 6 can be Loop Driver Modules
- AutroFieldBus
- Indicators for fault and power
- · Surface mounting on wall
- Rack mounting in standard 19" cabinets and flush mounting in consoles
- · Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements, CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)

Description/Application

The Controller, BC-420, serves as a connection unit for the detection loop, alarm sounders, controls and inputs.

It can accommodate up to a maximum of 12 modules. The system offers a *Loop Driver Module* for detection loops and several types of *I/O modules* (see *Optional Modules* below).

There can be a maximum of 6 Loop Driver Modules connected to each Controller. All modules are easily plugged onto each other on a standard mounting rail inside the unit.

The Controller provides connections for 2 Ethernet ports and 2 USB host ports.

The Controller communicates with other system units on the Ethernet-based local area network, AutroNet.

Optional Modules

- Loop Driver Module (BSD-310/311) for connection of detection loops
- Output Module (BSB-310) with 4 monitored outputs
- Output Module (BSJ-310) with 8 open collector non-monitored outputs
- Input Module (BSE-310) with 4 monitored inputs
- Input Module (BSE-320) with 8 non-monitored inputs (galvanically isolated)



Indicators

- Power (green)
- Fault (yellow)

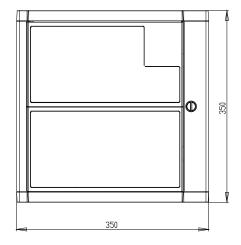
Capacity

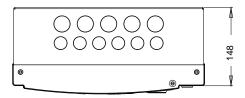
- 64 system units on the local area network; AutroNet
- 15000 loop units per system
- 12 modules per fire alarm control panel, of which 6 can be Loop Driver Modules
- 512 detectors and manual call-points can be connected to each Fire Alarm Control Panel (EN 54)
- 31 AutroFieldBus units connected to AutroFieldBus
- 127 loop units connected to one detection loop
- 40 socket/loop sounders connected to one detection loop
- 15 loop units connected to one Powerloop

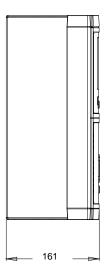


Technical specificat	ions		
Dimensions (mm)	350 x 350 x 161		
Cut-Out Dimensions (mm)	320x330x140		
Weight (kg)	8,5 kg		
Materials	Steel cabinet, ABS/PC-moulded front		
Mounting	Surface or flush mounting		
Protection class	IEC-529 / IP32		
Operating Temperature	-15°C to +70°C		
Storage Temperature	-40°C to +70°C		
Power supply	Nom. 27,2V DC (18-32V DC)		
Current consumption	156mA/27,2VDC (idle) Max. 340mA/27,2VDC (lamp test)		
Capacity – Loop Driver Modules and I/O Modules	Maximum 12 modules (A combination of BSD-310, BSB-310, BSE-310/320 and BSJ-310)		
Capacity – Loop Driver Module	Maximum 6 BSD-310/BSD-311. The maximum number of detectors and manual call-points that can be connected to these 6 modules are 512 (refer to EN 54). Maximum 127 detectors/manual call-points/electronic sounders/ I/O units on each detection loop.		
Detector connection	By use of BSD-310/ BSD-311		
Inputs By use of BSE-310 and BSE-320			
Outputs	By use of BSB-310 and BSJ-310		
Communication	AutroNet (Ethernet-based local area network)		
Communication Ports	2 Ethernet ports 2 USB host ports (max. 100mA) 1 serial port for the std. detection loop communication protocol 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom/ESPA4.4.4/MODBUS/VDR) 1 AutroFieldBus (AFB) interface FailSafe relay output		
Ethernet Cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes		

Product Name	Description
BC-420	Controller







REPEATER PANEL BU-BV-420

AutroSafe Interactive Fire Detection System, Release 4
Product Datasheet

Features

- User-friendly display and operator controls
- Scroll function for more alarms
- Backlit operational buttons. Text display suitable for full darkness operation
- Possible to change to different event windows
- Surface or flush mounting
- Rack mounting in standard 19" cabinets and flush mounting in consoles
- Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements, CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)

Description/Application

The Repeater Panel BU-BV-420 serves as both a Fire Brigade Panel and an Information Panel.

Settings on a dipswitch determine the type of panel (see dipswitch settings). The panels communicate with other system units on the Ethernet-based local area network, AutroNet.

The panel has an 16 x 40-character alphanumeric display.

Fire Brigade Panel

This panel displays alarms and allows you to operate alarms and receive additional information related to the relevant operation zone. To operate alarms, a fireman's key must be used (access level 2).

The panel is used to silence sounders and to reset alarms within a defined operation zone.

The panel provides the following buttons:

- More Events button
- Mute Panel button
- Silence Alarms button
- Reset System button

The panels provides the following indicators:

- Fire, More Events, Fire Brig. Signalled, Fault, Function Disabled, Testing, System Fault, Power
- Internal buzzer



Information Panel

The Information Panel serves as an indication device only. It provides information related to the defined operation zone(s).

The panel offers the following buttons:

- More Events button for scrolling through several alarms within the same event window
- Next Window button for stepping to a new event window, for example from Fire to Fault Warning window.
- Lamp Test button for activating all indicators to be lit for 5 seconds

The panels provides the following indicators:

- Fire / Alarm, Function Disabled, Function Delayed, Testing, Power
- Internal buzzer

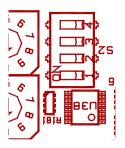


Technical specifications		
Dimensions (mm)	350 x 195 x 84	
Cut Out Dimensions	320 x 170 x 30 mm	
Weight	2,3 kg	
Materi <u>al</u> s	Steel cabinet, ABS/PC moulded front	
Mounting	Surface or flush mounting	
Protection class	IEC-529 / IP32	
Operating <u>Temperature</u>	-15°C to +70°C	
Storage Temperature	-40°C to +70°C	
Power supply	Nom27,2V DC (18-32V DC)	
Current Consumption	156mA/22,2V DC (idle) Max. 220mA/27,2V (lamp test)	
Communication	AutroNet (Ethernet-based local area network)	
Ethernet cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes	

Product Name	Description
BU-BV-420	Repeater Panel

Dipswitch settings

The settings on the dipswitch S2 determine the type of panel.



Fire Brigade Panel

S2-1 ON

S2-2 ON

S2-3 OFF

S2-4 OFF

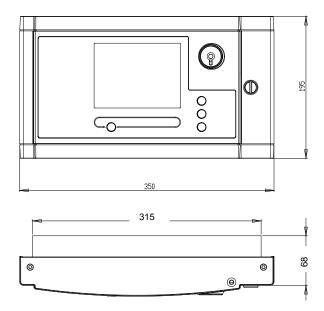
Information Panel

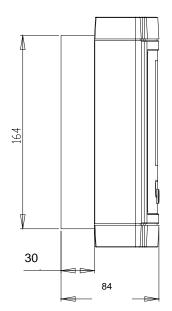
S2-1 ON

S2-2 OFF

S2-3 ON

S2-4 OFF





Power Cabinet BP-405

AutroSafe Interactive Fire Detection System, Release 4 Product Datasheet

Features

- Power Cabinet containing 5A/24V power supply and Power Board BSF-400 with 2x12V, 18Ah batteries (batteries not included)
- Power Board BSF-400, including
 - AutroFieldBus interface
 - 115VAC /230VAC input
 - 6 outputs 24VDC (max. 2A each)
 - 1 fault relay output
- Available space for 2x12V, 18Ah batteries
- Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements, CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)

Description/Application

The Power Cabinet BP-405 provides space for two 12V/18Ah batteries (not included).

The maximum power available is 24V/5A.

NOTE:

Do not connect batteries in parallel in an attempt to obtain higher ampere hour (Ah) capacity.

If additional power is required in an installation, an additional cabinet BP-405 with 24V/5A power supply can be used.

The power supply and battery brackets are already mounted when the cabinet is delivered from the factory.



Dipswitch Settings

Dipswitch settings for dipswitch S6 on Power Board BSF-400.

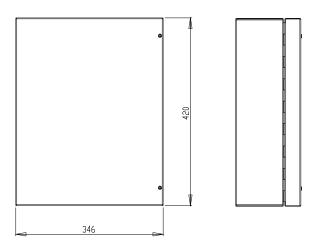
Dip- switch	Name	Description
S6-1	Earth Fault	ON: Earth fault monitoring activated OFF: Earth fault monitoring deactivated
S6-2	Battery Relay	Must always be set to OFF. (Bypasses battery relay control and sets battery relay ON).
S6-3	AutroFieldBus	ON: AuttroFieldBus connected OFF: AutroFieldBus not connected
S6-4	Not used	NA
S6-5	Battery	ON: Battery connected OFF: Battery not connected
S6-6	Power Unit Type	ON: BPS-405 OFF: BPS-410



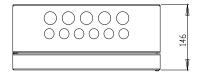
Technica	al specification	S		
			420 x 346 x 146	
		9,7 kg (wi	9,7 kg (without batteries)	
Materials		Steel cab	Steel cabinet	
Mounting		Surface o	r flush mo	unting
Protection of	class	IEC-529 /	IEC-529 / IP32	
Operating 7	Temperature		-15°C to +70°C 4	
Storage Te	mperature		-40°C to +70°C	
Current		230VAC 1	1,6A	
Inrush curre	ent	< 35A in 1	10 ms	
Input volta	ige range			
115VAC ra	nge	230VAC I	range	
94 – 132 V	AC	184 – 264	VĂC	
	47	– 63 Hz		
Output				
Max load		Max load	without ba	attery
3,5A		5 A		-
Min battery	' size	Max batte	ery size	
7,2 Ah		18 Ah		
Accuracy ¹		•		
<170mV _{RMS}	3			
Efficiency				
>86%				
Voltage ou	it			
19-32V				
Overload p	protection			
7,5A				
Shutdown o	o/p, re-power on to re	ecover		
Fuses				
Battery ²		Charger ²		
5A		5A		
Dipswitch,	. S6			
Number	Description		Cond	dition
S6.1	Earth fault sense		ON/0	
S6.2	Battery relay		OFF	
S6.3	AutroFieldBus		ON/0	OFF
S6.4				
S6.5			ON	
S6.6			oply ON	
Common data				
Fuses				
Name	Electronic fuse	Fuse	Туре	Special
A 4	\/ 74		F	function
A1	Yes, 7A	2A	Fast	
A2	Yes, 7A	2A	Fast	
B1	Yes, 7A	2A	Fast	1
B2	Yes, 7A	2A	Fast	3
C1	Yes, 7A	2A	Fast	3
C2	Yes, 7A	2A	Fast	3

Technical specifications					
Cable paramete	rs				
OUtput name	Cable siz	ze max.			
A1					
A2					
B1					
B2		Single thread 6 mm ² (10 AWG)			
C1		ead 4 mm ² (12 A			
C2	Minimum	Minimum thread 0,2 mm ² (24 AWG)			
Battery					
Charger					
AutroFieldBus	AutroFieldBus Minimum				
Dipswitch S5, AutroFieldBus earth fault sense					
S5.1	S5.2		Function		
OFF	OFF		AFB earth fault OFF		
ON	ON	•	AFB earth fault ON		
BSF-400					
Current consumption 85mA		·			

Product Name	Description
BP-405	Power Cabinet



¹ The value is given in Volt peak to peak and this is converted



to RMS.

Fuse must have high current breaking capacity.

This port turns OFF for 3 seconds during initialization of AutroSafe if the Power Board BSF-400 is connected through

AutroFieldBus.

4 Cooling is strongly recommended if the unit is placed in environments where the temperature during normal operation is likely to exceed $+55^{\circ}$ C (and up to $+70^{\circ}$ C) for long periods of time.

AUTROSAFE CONTROLLER RACK UNIT BC-440 / BC-440G2

AutroSafe Interactive Fire Detection System, Release 4 Product Datasheet

Features

- Main board of AutroSafe ready for subrack mounting
- Designed to meet the requirements of:
 - EN54-2
 - IACS UR E10
 - IMO/SOLAS
 - FM /NFPA72
 - IEC61508 SIL2 (116-BC-440G2 only)
- Subrack 3Ux12HP, 200mm deep
- Fault Output Relay
- · Redundant Power Input, monitored
- Serial port RS232/RS422/RS485
- AutroFieldBus
- Redundant Ethernet



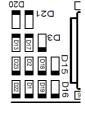
The Controller Rack Unit BC-440 serves as a connection unit for the detection loop, alarm sounders, controls and inputs. It is a variant of the BC-420 Controller prepared for rack installations. Together with the IO modules the unit will have the full functionality of the BC-420 Controller.

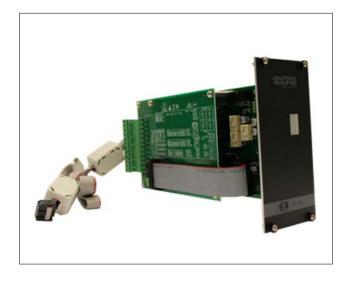
The Controller is equipped with 2 Ethernet ports, one AutroFieldBus port and one serial port. The Controller communicates with other system units using the Ethernet-based local area network, AutroNet and external equipment using AutroCom and Modbus.

The serial port may be set to RS-232/422 or 485 and can communicate with external equipment using AutroCom, Modbus, NMEA and ESPA 4.4.4.

Indicators







Capacity

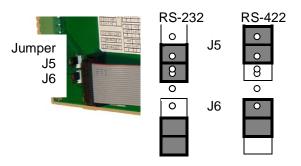
- 31 BC-440 per system
- 15000 loop units per system
- 30 I/O modules can be connected to one I/O stack if BSL-310A is used (12 I/O modules if BSL-310 is used)
- 12 loop driver modules can be connected to one panel
- 512 loop units can be connected to one I/O-stack
- 1024 loop units can be connected to one panel (a total of 512 detectors and/or manual call points if EN 54 approval is required)
- 31 AutroFieldBus units can be connected to AutroFieldBus
- 127 loop units can be connected to one detection loop
- 15 loop units can be connected to one Powerloop



Technical Specifications	
Dimensions (mm)	3Ux12HPx200mm
Weight (g)	930
Housing material	Aluminum, printed circuit board
Mounting	3U Subrack
Power supply	18-32V
Current consumption	125mA
Operating	-15 to +70 °C
Temperature range	
Storage Temperature	-40 to +70 °C
range	
Humidity	10% - 95% RH (non-condensing)
Degree of protection	Built in subrack
Approvals	MED
Interfaces	Autronica Loop Communication
	protocol (AL_Com)
	Serial port (RS-232/485/422)
	Dual Ethernet
	AutroFieldBus
Cable terminals	Max 2.5 mm ² single core wires
Cable requirements	Refer to specification for AutroSafe or
AL_Com	Autroprime
Fault relay rating	1A 30VDC
Output relay type	Dry contact, Fail to Safe; show Fault
	state on loss of power.
Length 10-wire ribbon	Maximum 3m (included)
cable	

Product Name	Part number	Description
Floudet Name	Fait iluilibei	Description
BC-440	116-BC-440	AutroSafe Controller
		Rack Unit
BC-440G2	116-BC-440G2	AutroSafe Controller
		Rack Unit, IEC61508
		SIL2
Optional:		
UB-383	116-UB-383	19" subrack 160mm
		Europe
UW-1516/1	116-UW-1516/1	Dummy plate 19" for
		BC-440
		3Ux12HP
-	6175-100-0010	Ferrite clamps

Jumper Settings RS-232 and RS-422



Installation / Connections

- For information on rotary switches and dipswitches, refer to the Installation Handbook, AutroSafe 4 Interactive Fire Detection System.
- Rear end: 2 Ethernet RJ-45 sockets
- 10-wire ribbon cable to BSL-310 Module, 3m long included.
 2 Ferrite clamps, one at each end of the 10-wire ribbon cable shall be applied.

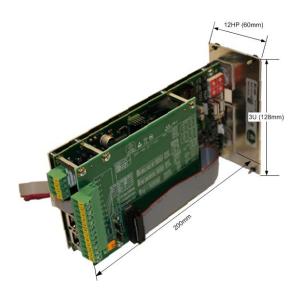
Note

The installation shall ensure sufficient cooling by airflow.

Terminal	Function
J18.1	+24v In 1
J18.2	0v In 1
J18.3	+24v In 2
J18.4	0v In 2

Terminal	Function	Description
J1.1	ASFB A1	AutroFieldBus AS (In+)
J1.2	ASFB A2	AutroFieldBus AS (In-)
J1.3	ASFB B1	AutroFieldBus AS (Out+)
J1.4	ASFB B2	AutroFieldBus AS (Out-)
J1.5	Chassis	Connected to frame
J1.6	Serial 1	RS-485: A / RS-232 TX
J1.7	Serial 2	RS-485: B / RS-232 RX
J1.8	MFSPX	RS-422: X
J1.9	MFSPZ	RS-422: Z
J1.10	Chassis	Connected to frame
J1.11	Fault Relay	Closed to common when OK,
	NO	open at Fail
J1.12	Fault Relay	Common contact
	COM	

Dimensions



FIRE BRIGADE LOOP PANEL BU-110

AutroSafe 4 Interactive Fire Detection System Product Datasheet

Features

- User-friendly display and operator controls
- Scroll function for more alarms
- Text display suitable for full darkness operation
- On-wall mounting
- Conforms to EN 54 regulations
- Conforms to CE standards
- Designed to meet the requirement of the major maritime classification societies



Description / Application

The unit has been designed for use with AutroSafe 4 Interactive Fire Detection System.

From the Fire Brigade Loop Panel BU-110 it is possible to mute the panel's internal buzzer, silence/resound sounders/bells etc. and reset the system.

The panel can be configured (by means of the configuration tool) to show detection zones and point information in an alarm situation, or detection zones only.

Only points in alarm are shown in the display. Faults and disablements are indicated by LED indicators. The total number of detection zones in alarm will always be shown.

By operating the More Events Button, it is possible to scroll through and view detailed information of the first 64 alarms (or 32 first alarms, if the panel is configured to show both detection zones and points).

The panel is powered by the detection loop.

Operator controls

The panel offers the following buttons:

- More Events button for scrolling through several alarms
- Silence Buzzer (60 dB) for silencing the internal buzzer (access level 1). The internal buzzer will remain muted until a new alarm is triggered
- Silence Alarm button
- Combined Reset button/Lamp Test (access level 1)
- Toggle backlight brightness between high and low by holding the Silence Buzzer button for 5 seconds until audible beep (access level 1)

Indicators

The panel provides the following indicators:

- Fire symbol, Alarm Routing Activated, Fault, Function Disabled, Test, System Fault, Power, More Events
- Internal buzzer

Capacity

A maximum of 8 panels can be connected to the detection loop.



Product Name	Part number	Description
BU-110	116-BU-110	Fire Brigade Loop Panel

Technical specifications		
Dimensions (mm)	310 x 154 x 45	
Weight (g)	0,8kg	
Housing material	ABS/PC moulded front	
Mounting	On-wall, requires flat surface to maintain IP rating (IP32)	
Protection class	IEC529 / IP32	
Storage temperature range	-30 to +70 °C	
Operating temperature range	-15 to +70 °C	
Humidity	10% - 95% RH (non-condensing)	
Connections	AL_Com Detection Loop	
Cable terminals	Max 2.5 mm ² single core wires	
Cable requirements Al_Com	Refer to specification for AutroSafe or Autroprime	
Current consumption	6mA (max) <1mA (idle)	

Approvals
EN54-17, EN54-18, EN54-2
IACS-E10
CE

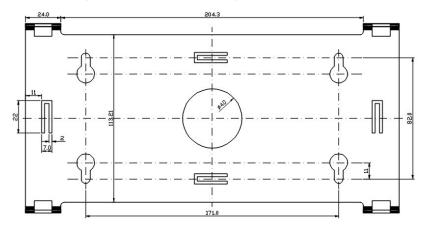
Installation Overview

The Fire Brigade Loop Panel (BU-110) is to be surface mounted onto a bracket on the wall.

To ensure optimal readability of the panels' display, the recommended mounting height of the panel top is approximately 175 cm above the floor.

The panels must be placed according to local regulations and in consultation with the fire brigade.

Mounting bracket drawing



Panel and Bracket

Fire Brigade Loop Panel (BU-110)

Mounted onto a bracket (UD-732).

Dimensions:
HxWxD (mm): 310 x 154 x 45

Mounting Instructions

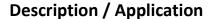
Step	Description
1	Find the text foils in the relevant language for the panel, and insert the text foils in the correct locations (there are two different foils in one foil kit). Through the small hole near the slot, use a small screwdriver or similar to slightly bend the edge (approx. 1mm) of each foil until the edge slips behind the opening of the slot.
2	Note that the panel must be placed according to local regulations and in consultation with the fire brigade. • Mount the panel bracket onto a wall with a flat surface in order to maintain IP rating (IP32).
3	Connect AL_Com loop cables to the correct terminal points.
4	 Place and center the lower part of the panel onto the lower part of the bracket, then simply push the upper part of the panel towards the bracket until it snaps on.

INFORMATION LOOP PANEL BV-110

AutroSafe 4 Interactive Fire Detection System Product Datasheet

Features

- User-friendly display and operator controls
- Scroll function for more alarms
- Text display suitable for full darkness operation
- Displays alarms, faults and disablements
- · Possible to change to different event windows
- On-wall mounting
- Conforms to EN 54 regulations
- Conforms to CE standards
- Designed to meet the requirement of the major maritime classification societies



The unit has been designed for use with AutroSafe 4 Interactive Fire Detection System.

The Information Loop Panel BV-110 serves as an indication device only. It provides information related to the defined operation zone(s).

The panel can be configured (by means of the configuration tool) to show detection zones and point information in an alarm situation, or detection zones only.

By operating the More Events Button, it is possible to scroll through and view detailed information of the first 64 alarms (or 32 first alarms, if the panel is configured to show both detection zones and points).

The panel can store up to 6 faults and 6 disablements. The total number of faults and disablements in the system will always be shown, but it is only possible to scroll through and view detailed information of the first 6 faults and disablements (using the More Events Button).



Operator controls

The panel offers the following buttons:

- More Events button for scrolling through several alarms within the same event window
- Silence Buzzer (60 dB) for silencing the internal buzzer. The internal buzzer will remain muted until a new alarm or fault is triggered
- Next Window button for stepping to a new event window, for example from Fire Alarm to Fault Warning window
- Toggle backlight brightness between high and low by holding the Next Window button for 5 seconds until audible beep
- Lamp Test button for activating all indicators

Indicators

The panel provides the following indicators:

- Fire Symbol, Alarm Routing Activated, Fault, Function Disabled, Test, System Fault, Power, More Events
- Internal buzzer

Capacity

A maximum of 8 panels can be connected to the detection loop.



Product Name	Part number	Description
BV-110	116-BV-110	Information Loop Panel

Technical specifications		
Dimensions (mm)	310 x 154 x 45	
Weight with mounting bracket	0,8kg	
Housing material	ABS/PC moulded front	
Mounting	On-wall, requires flat surface to maintain IP rating (IP32)	
Protection class	IEC529 / IP32	
Storage temperature range	-30 to +70 °C	
Operating temperature range	-15 to +70 °C	
Humidity	10% - 95% RH (non-condensing)	
Connections	AL_Com Detection Loop	
Cable terminals	Max 2.5 mm ² single core wires	
Cable requirements Al_Com	Refer to specification for AutroSafe or Autroprime	
Current consumption	6mA (max) <1mA (idle)	

Approvals
EN54-17, EN54-18, EN54-2
IACS-E10
CE

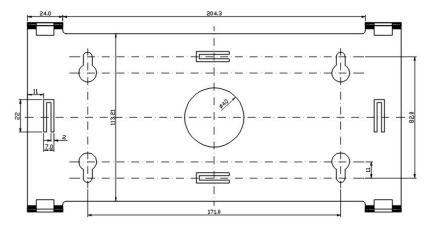
Installation Overview

The Information Loop Panel (BV-110) is to be surface mounted onto a bracket on the wall.

To ensure optimal readability of the panels' display, the recommended mounting height of the panel top is approximately 175 cm above the floor.

The panels must be placed according to local regulations and in consultation with the fire brigade.

Mounting bracket drawing



Panel and Bracket

Information Loop Panel (BV-110)

Mounted onto a bracket (UD-732).

Dimensions:
HxWxD (mm): 310 x 154 x 45

Mounting Instructions

Step	Description
1	 Find the text foils in the relevant language for the panel, and insert the text foils in the correct locations (there are two different foils in one foil kit). Through the small hole near the slot, use a small screwdriver or similar to slightly bend the edge (approx. 1mm) of each foil until the edge slips behind the opening of the slot.
2	Note that the panel must be placed according to local regulations and in consultation with the fire brigade.
	Mount the panel bracket onto a wall with a flat surface in order to maintain IP rating (IP32).
3	Connect AL_Com loop cables to the correct terminal points.
4	 Place and center the lower part of the panel onto the lower part of the bracket, then simply push the upper part of the panel towards the bracket until it snaps on.



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