

# CONTROLLER BC-420

## AutoSafe 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
- AutoFieldBus
- 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, AutoNet.

### 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; AutoNet
- 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 AutoFieldBus units connected to AutoFieldBus
- 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 specifications	
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	<ul style="list-style-type: none"> <li>• 2 Ethernet ports</li> <li>• 2 USB host ports (max. 100mA)</li> <li>• 1 serial port for the std. detection loop communication protocol</li> <li>• 1 RS-232, RS-422 or RS-485 serial port for communication with third party equipment (AutroCom /ESPA4.4.4/MODBUS/VDR)</li> <li>• 1 AutroFieldBus (AFB) interface</li> <li>• FailSafe relay output</li> </ul>
Ethernet Cable	CAT 5 or better. Shielded cable required in maritime installations. Max. 100m between Ethernet nodes

Product Name	Description
BC-420	Controller

Dimensions (mm)

