

Autronica Fire and Security



PRODUCTS 2016

Fire safety

Division Onshore Global



AUTRONICA
United Technologies



Autronica Fire and Security is a leading innovator, manufacturer and supplier of fire and gas safety worldwide. Our products ensure safety in applications on land, sea and in the petrochemical, oil and gas sectors.

Owned by United Technologies Corporation (UTC), we employ more than 450 people handling the complete value chain, from idea, development and manufacturing to the marketing, sales and servicing of our products. We are an international company with worldwide offices and our HQ is located in Trondheim, Norway's technology hotspot.

Protecting life, environment, and property

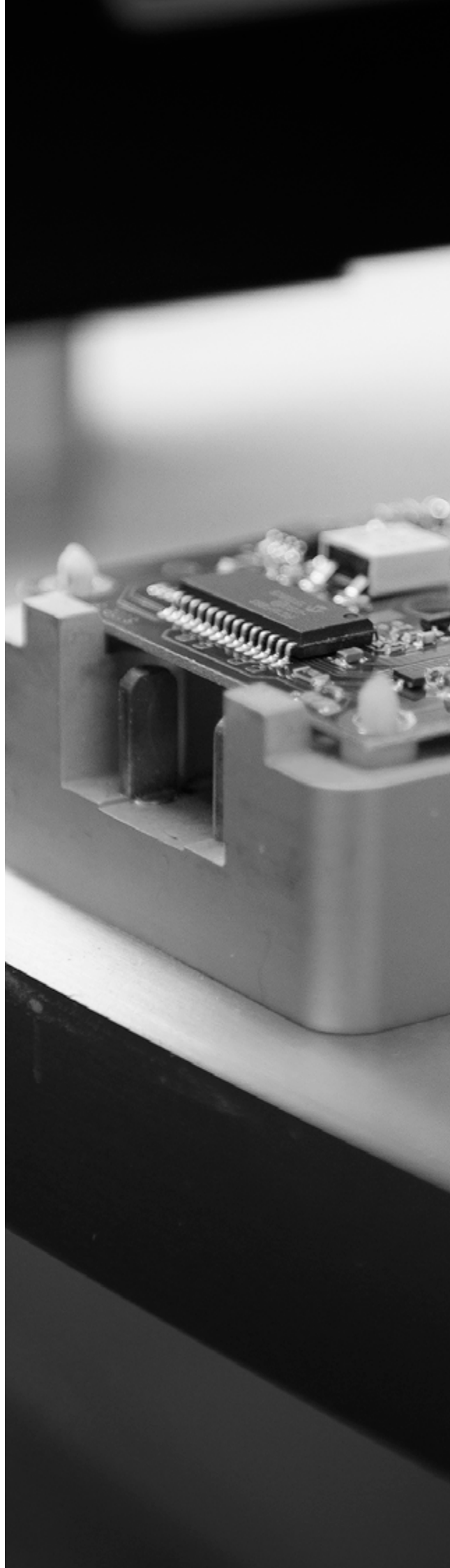
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Stringent control throughout Autronica Fire and Security AS assures the excellence of our products and services. For a complete overview of our approvals, go to www.autronicafire.com.

AutoSafe 4 delivers the most rigorous fire safety yet



AutroSafe fire detection system

The new generation in fire safety

Our task was demanding, yet simple: Take the best fire safety system around and make it even better. The new and improved AutoSafe 4 is designed for the toughest requirements and expands the possibilities of a fire detection system even further. From hotels to cruise ships to drilling platforms, AutoSafe 4 delivers the most rigorous fire safety yet.

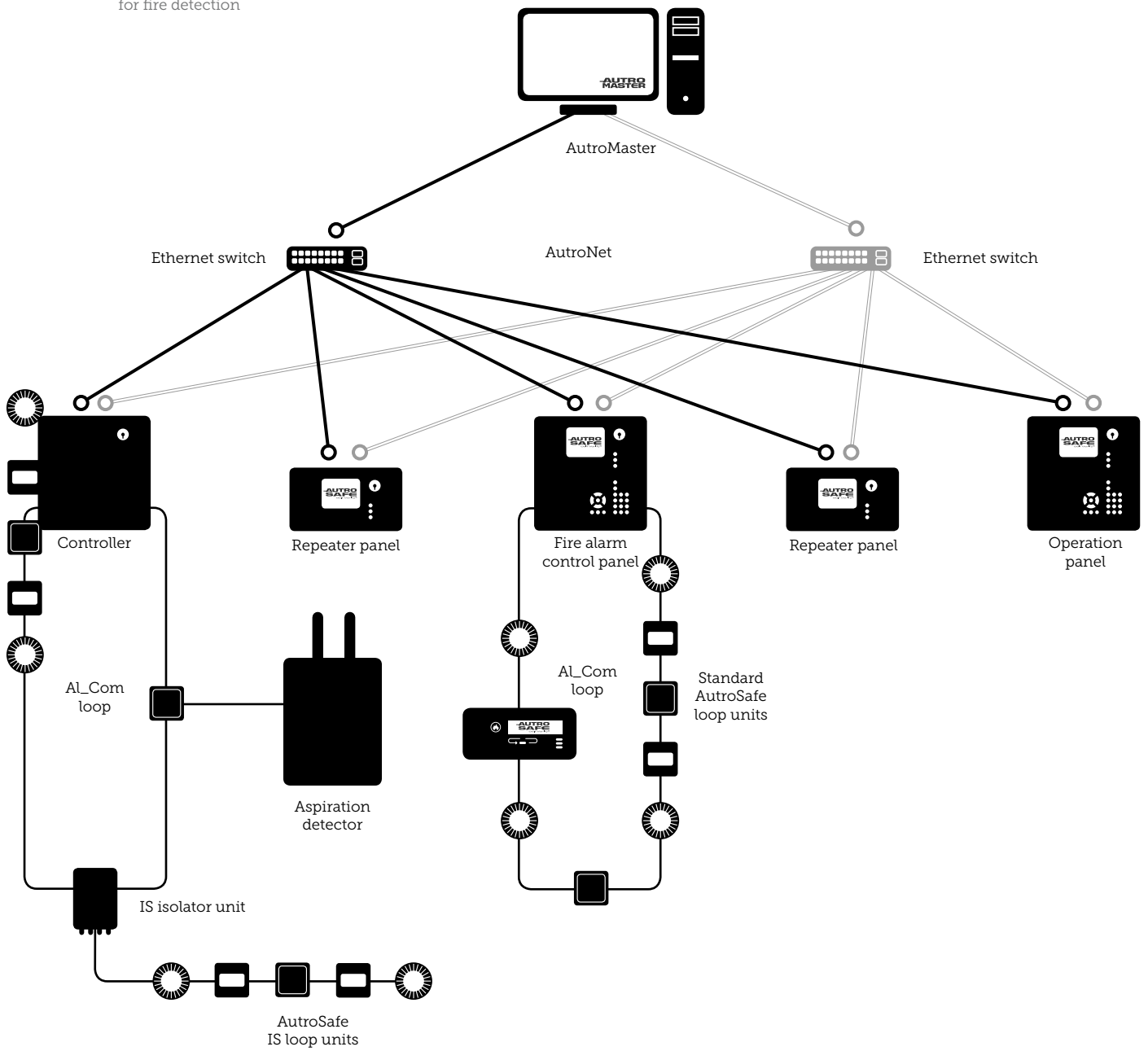
Autronica Fire and Security launched AutoSafe, our high-end fire detection system, in 1999. From day one, AutoSafe has proven its unique stability and reliability in more than 15 000 installations worldwide, both on- and offshore.

AutoSafe 4 provides advanced functionality for a wide range of applications. The system is designed to meet all requirements in the high-end segment of the onshore, maritime and offshore market, and is certified according to European directives (CPD) requiring EN 54 compliance. The system is also pending a Factory Mutual (FM) approval according to NFPA 72.

Reliable communication is paramount to your safety. That's why we're adding AutoNet to the AutoSafe system, an innovative network solution safeguarding communication between panels. AutoNet ensures a redundant and high-speed network expanding the reach of the AutoSafe system even further. The system can be set up either in a star or ring network, depending on your needs.

History proves you can rely on AutoSafe. All existing functionality has stood up to the toughest tests worldwide for more than 10 years. With AutoSafe 4, Autronica has once again taken fire safety to a higher level.

AutoSafe
 – a complete solution
 for fire detection



System panels

Image	Part number	Description	Dimensions H x W x D (mm)	Notes
	116-BS-420/XX	Fire alarm control panel	350 x 350 x 161 Flush mounting depth: 148	Can be used as a stand-alone panel as well as part of a network system. All operations, alarm management, indications and other functions within an operation zone are controlled and handled by the panel. Loop driver, input and output modules can be connected. An integrated AutoFieldBus interface makes it possible to connect AutoFieldBus equipment to the panel. Equipped with 2 x loop driver BSD-310. Additional modules (page 9) can be added.
	116-BC-420/XX	Controller	350 x 350 x 161	Controller for connection of loop driver modules as well as input and output modules. An integrated AutoFieldBus interface makes it possible to connect AutoFieldBus equipment to the panel. Equipped with 2 x loop driver BSD-310. Additional modules (page 9) can be added.
	116-BC-440	Controller rack unit	3U x 12HP x 200	Serves as a connection unit for the detection loop, alarm sounders, controls and inputs. It is a variant of the BC-420 prepared for rack installations. Together with the I/O modules the unit will have the full functionality of the BC-420. Equipped with 2 Ethernet ports, one AutoFieldBus port and one serial port.
	116-BS-430/XX	Operator panel	350 x 350 x 84	The operator panel controls and handles all operations, alarm management, indications and other functions within an operation zone. No loop driver, input or output modules can be connected to this panel.
	116-BU-BV-420/XX	Repeater panel	195 x 350 x 84	Dip switches on the panel control the panel function: As a fire brigade panel it can operate alarms within one or more operation zones. As an information panel no operation of alarms are available. The information panel provides information from one or more operation zones.
	116-BP-405	Power cabinet	420 x 346 x 146	Includes a 5 A power pack (BPS-405) which provides six 24 VDC / 2 A outputs. The input voltage is 115/230 VAC and the total maximum power available is 24 VDC / 5 A. An integrated AutoFieldBus interface makes it possible for the power pack to communicate (send fault messages) with the BS-420 or BC-420 panel. Space for two 12 V / 18 Ah batteries (not included).

XX can be replaced by the following codes

GB = English

NL = Dutch

System panel kits

For engineering purposes, we have established kits to be equipped according to specifications.

The BS-420 and BC-420 panels have space for up to 12 modules totally inside the cabinet.
An AL_Com+ stack can contain up to six loop driver modules (BSD-3xx). By using AutroFieldBus, an additional AL_Com+ stack (with up to six additional loop driver modules) can be added to the system.


Image	Part number	Description	Including	Options
	116-KIT-BS-420	Fire alarm control panel kit	Panel front BSV-420 Cabinet UEA-400 Power supply module BSS-310A Communication module BSL-310 Text foil E-2879/XX*	Loop driver module BSD-310 Loop driver module H.P. BSD-311 BS-100 loop driver module BSD-330 Output module BSB-310A Output module BSJ-310 Input module BSE-310 Input module BSE-320 Dual power monitoring module BSS-311
	116-KIT-BC-420	Controller kit	Panel front BCV-420 Cabinet UEA-400 Power supply module BSS-310A Communication module BSL-310 Text foil E-2880/XX*	Loop driver module BSD-310 Loop driver module H.P. BSD-311 BS-100 loop driver module BSD-330 Output module BSB-310A Output module BSJ-310 Input module BSE-310 Input module BSE-320
	116-KIT-BS-430	Operator panel kit	Panel front BSV-420 Cabinet UE-1488 Text foil E-2879/XX*	
	116-KIT-BU-BV-420	Repeater panel kit	Panel front BUV-420 Cabinet UE-1489 Text foil E-2880/XX*	

*Available languages, replace XX with one of the following codes:

GB = English	IS = Icelandic	NL = Dutch
E = Spanish	BR = Portuguese	DK = Danish
F = French	PL = Polish	S = Swedish
H = Hungarian	RK = Russian	N = Norwegian
I = Italian	SF = Finnish	

Loop panels

Loop-powered panels are a unique addition to our system panel BU/BV-420, providing our customers a number of advantages: Quicker installation, reduced cabling and cost, and lowered system complexity. A detection loop can accommodate up to eight loop panels.

Image	Part number	Description	Dimensions H x W x D (mm)	Current consumption	Notes
	116-KIT-BU-110	Fire brigade loop panel kit*	310 x 154 x 45	<1 mA (idle) 6 mA (max)	Enables silencing the panel's internal buzzer, silencing alarms, and resetting the system. Alarms only are shown in the display.
	116-BU-110GB	Fire brigade loop panel, English text			
	116-BU-110NL	Fire brigade loop panel, Dutch text			
	116-KIT-BV-110	Information loop panel kit*	310 x 154 x 45	<1 mA (idle) 6 mA (max)	Indication device only. Provides information related to the defined operation zone(s).
	116-BV-110GB	Information loop panel, English text			
	116-BV-110NL	Information loop panel, Dutch text			

* Please specify language when ordering:

GB = English

E = Spanish

F = French

H = Hungarian

I = Italian

IS = Icelandic

BR = Portuguese

PL = Polish

RK = Russian

SF = Finnish

NL = Dutch

DK = Danish

S = Swedish

N = Norwegian

Modules

In addition to loop driver modules BSD-310, BSD-310N and BSD-311, as well as the mandatory power supply module BSS-310A and communication module BSL-310, AutoSafe features input and output modules for different applications (monitored alarm loops, servicing relays and LEDs, control inputs, etc.)

The modules have the same format, mount onto the panels' DIN-mounting rail and plug into one another.





Important note on module capacity.

Each fire alarm panel/controller contains a power supply module BSS-310A and a communication module BSL-310.


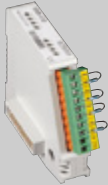




The BS-420 and BC-420 panels have space for up to 12 modules totally inside the cabinet.

An AL_Com+ stack can contain up to six loop driver modules (BSD-3xx)




By using AutoFieldBus, an additional AL_Com+ stack (with up to six additional loop driver modules) can be added to the system.

Image	Part number	Description	Monitored inputs	Monitored outputs	Total inputs	Total outputs	Monitors short circuits	Ensures loop communication	Zone 2 only	Amplified power output	Galvanically insulated inputs/outputs	Max. per panel	Notes
	116-BSB-310A	Output module		•	0	4	•						Requires external 24V
	116-BSD-310	Loop driver module			–	–	•	•				6/12	Max. 127 loop units
	116-BSD-310/N	Loop driver module			–	–	•	•	•			6/12	Max. 127 loop units
	116-BSD-311	Loop driver module H.P.			–	–	•	•		•			


Modules (cont.)

Image	Part number	Description	Monitored inputs	Monitored outputs	Total inputs	Total outputs	Monitors short circuits	Ensures loop communication	Zone 2 only	Amplified power output	Galvanically insulated inputs/outputs	Max. per panel	Notes
	116-BSD-330	BS-100 loop driver module			-	-	•	•				8	If more than 3 modules are installed, an additional power supply unit BSS-310A is required
	116-BSE-310	Input module	•		4	0							
	116-BSE-320	Input module			8	0					•		
	116-BSJ-310	Output module			0	8							Open transistor outputs
	116-BSS-310A	Power supply module										3	
	116-BSS-311	Dual power monitoring module										2	

Communication

Image	Part number	Description
	116-BSD-321/1	<p>AutoFieldBus protocol converter Interface between AutoFieldBus and AL_Com+. Enables communication between all AL_Com+ modules in an AL_Com+ stack connected to AutoFieldBus. The module enables AutoSafe Dual Safety configuration, with both ordinary AL_Com communication and AutoFieldBus.</p>
	116-BSL-310	<p>AutoSafe communication module, serves as an interface for the common internal communication line between all the different I/O modules. Part of the fire alarm control panel.</p>
	116-BSL-321	<p>Multi mode fibre optic converter Amplifier for AUTROLON/AutoFieldBus networks, which acts as a fibre-optic modem. The converter ensures reliable communication for distances of up to 3000 m. Uses multi mode (62.5/125 µm or 50/125 µm) fibre-optic cable. Ingress Protection level: IP20</p>
	116-BSL-322	<p>Single mode fibre optic converter Amplifier for AUTROLON/AutoFieldBus networks, which acts as a fibre-optic modem. The converter ensures reliable communication for distances of up to 15000 m. Uses single-mode (9/125 µm) fibre-optic cable. Ingress Protection level: IP20</p>
	116-BSL-325	<p>AUTROLON/AutoFieldBus communication amplifier Amplifier for communication signals on networks. The amplifier ensures reliable communication over large distances. The amplifier increases max. cable length from 1000 m to 2800 m. Ingress Protection level: IP20</p>
	116-BSL-337	<p>AutoSafe BU-70 interface module Enables the connection of BU-70/BU-100/BU-101 to AutoSafe. This is a simple, cost effective way to upgrade BS-100 systems to AutoSafe. The RS232/20 mA current loop converter BSL-12/2 must be used to convert RS232 to 20 mA current loop communication. Ingress Protection level: IP20</p>

Printer

Image	Part number	Description
	116-BUP-400	Printer unit for AutoSafe 4
-	116-1712-012.0001	Printer paper 57 x 46 x 13 mm / 25 m

Engineering

Part number	Description
116-PROG-AUTROSAFE	Customer specific software for AutoSafe
116-TXT-AUTROSAFE	Customer text/controls

Service tools

Part number	Description
116-WAS-2000	AS2000, loop diagnostic tool
116-XJA-027	Connection cable for AS2000; for connection between computer and fire alarm panel
116-XGE-1/10-110	Ribbon cable for connection of BSF-310/BSA-400 to BSL-310. 110 cm. Order only.
116-XGE-1/10-200	Ribbon cable for connection of BSF-310/BSA-400 to BSL-310. 200 cm.
116-XL-073	Conversion cable from AutoSafe 3 to AutoSafe 4

OPC server

With the AutroSafe OPC server several fire detection systems and other control systems can communicate. The solution improves the compatibility between the AutroSafe and surveillance systems from other manufacturers.

Part number	Description
116-AS-OPC-SERVER/CD1	AutroSafe OPC Server CD V1.2 incl. access code for access level 1. Includes read access to all status information for detectors, output and alarm devices. This level of license will also make it possible to send (write) Silence, Reset and SetTime commands to the AutroSafe system. Within this level you can also Disable/Enable detectors.
116-AS-OPC-SERVER/CD2	AutroSafe OPC Server CD V1.2 incl. access code for access level 2. Includes all functionality in level 1, plus the possibility to Activate/Deactivate and Enable/Disable outputs and alarm devices via OPC write commands.
116-AS-OPC-SERVER/CD3	AutroSafe OPC Server CD V1.2 incl. access code for access level 3. Includes all functionality in level 1 and 2. This level also provides additional information for points, for example AMEAS, Temp, Smoke, Alarm limits and Engineering values.



Simple, reliable and flexible
fire detection system

Autroprime fire detection system

Fire detection made easy

For small-to-medium sized installations, Autroprime® brings simplicity, quality and extensive functionality in one integrated system, providing safety and economy in a complete package.

Autroprime®, the easy, reliable and flexible fire detection system from Autronica Fire and Security AS, provides a high-tech, low-cost alternative for fire detection in small-to-medium sized applications. The system features the standards-approved, effective and reliable detection Autronica customers expect, as well as a range of specifically developed features.

Autronica products have always been associated with cutting-edge

technologies that change the way in which people think about fire detection. Autroprime® is no exception here: the system includes many tried and tested Autronica technologies; the revolutionary part is that these high-end features are put together in an affordable package.


Autroprime® finally brings a truly integrated concept to fire detection: everything is in place, and system functionality and reliability have never been better. Low-level simplicity ensures that this fire detection system exceeds expectation and provides next-generation possibilities, all for a low life-cycle cost.

Panels

The Autoprime system allows for a combination of maximum 8 panels and mimic drivers on a redundant panel bus

Image	Part number	Description	Dimensions H x W x D (mm)	Notes
	116-BS-200	Fire alarm control panel	420 x 346 x 140	Full fire detection system with 2 loop drivers each controlling 127 devices. The operator panel may be mounted remotely with redundant connections both for signal and power. Max. 4 loops.
	116-BS-211	Repeater panel	220 x 310 x 45	Helps users manage alarms and other events. Panel bus included
	116-BU-210	Fire brigade panel	154 x 310 x 45	Showing alarms only. The user may mute the internal buzzer, silence sounders/bells and reset the system. Panel bus included.
	116-BV-210	Information panel	154 x 310 x 45	Provides all information, but does not allow handling of events. Panel bus included
	116-BUR-200	Mimic driver	181 x 125 x 40	Panel bus included

Printer

Image	Part number	Description
	116-BUP-200	Printer unit for Autoprime
–	116-1712-012.0001	Printer paper 57 x 46 x 13 mm / 25 m

Modules

Part number	Description
116-BSD-200A/PACK	Autoprime loop extension pack, 2 loops

Service and configuration tool

Part number	Description
116-AUTROCLIENT	AutoClient, latest version

Fire detection system accessories

In order to project our fire detection system to any application, we provide a wide range of accessories such as cabinets, racks, mounting equipment, batteries etc.

Cabinets and racks

Part number	Description	System	Dimensions H x W x D (mm)	Capacity
116-BT-422/B	Battery cabinet 18 Ah		420 x 346 x 146	
116-BV-311	Cabinet for evacuation and emergency documents	AutroSafe	402 x 347 x 75	
116-UEA-323/1	Cabinet for flush mounting BS-410/-420/BC-420	AutroSafe	Flush mounting: 320 x 320 x 140	
116-UE-1710	Battery shelf	19" rack	398 x 190 x 174	2 x 12 V / 36 Ah or 1 x 12 V / 65 Ah battery
116-US-820/1	Document holder with logo	Both		
116-6800-003.	Renag key safe, lacquered	Both		
116-6745-011.	Standard fire key for panel door (plastic)			

Rittal cabinets available on request.

Mounting and front plates

Part number	Description	Height (mm)	Module height*	Notes
116-UB-383	19" subrack 160 mm, Europe		3	
116-UE-474	Mounting plate, no cutouts	534	12	For UAK-2 (back wall)
116-UW-1518	Mounting plate	622 x 455	-	For mounting AutroSafe 4 front panel on double BS-100 cabinet
116-UW-1516/1	Dummy plate 19", 12HP	128	3	For BC-440
116-UW-1514	Mounting plate for flush mounting panel front in 19" rack	399	9	For BS-420/-430 and BC-420
116-UW-1482	Mounting kit for 19" cabinet/rack	263	6	For BU-BV-420 cabinets

*Module height (h) = 44.5 mm.

Switches and converters

A network solution (AutoNet) with more than two panels demands the use of switches. Fibre converters are utilized to extend your network where fibre is available. VDSL converters are utilized to make use of existing copper wiring when upgrading old systems. Only the listed Ethernet switches and converters are approved and supported by Autronica Fire and Security AS. The type and number of switches/converters depend on the installation/network construction (no. of panels and distance between panels and switches/converters).

Image	Part number	Description*	Current consumption (max.) @ 24 VDC	RJ45 ports	Fibre optic ports**	Operating temperature
	116-5151-030.2127	FL switch SFNT 5TX	120 mA	5	–	-40 - 75 °C
	116-5151-030.2128	FL switch SFNT 4TX/FX	160 mA	4	1 MM (SC)	-40 - 75 °C
	116-5151-030.2129	FL switch SFNT 8TX	153 mA	8	–	-40 - 75 °C
	116-5151-030.2130	FL switch SFNT 7TX/FX	175 mA	7	1 MM (SC)	-40 - 70 °C
	116-5151-030.2131	FL switch LM 5TX	150 mA	5	–	-40 - 70 °C
	116-5151-030.2132	FL switch LM 4TX/FX	380 mA	4	1 MM (SC)	-40 - 70 °C
	116-5151-030.2133	FL switch LM 4TX/2FX	400 mA	4	2 MM (SC)	-40 - 70 °C

* SFNT = Standard Function, Narrow housing, high Temperature range
 LM = Lean Managed
 SFNB = Standard Function, Narrow housing, Basic entry level
 SFN = Standard Function, Narrow housing

** MM = Multi Mode
 SM = Single Mode
 SC = Square Connector
 (Set and Click, Stab and Click, Standard Connector)


Switches and converters (cont.)

Image	Part number	Description*	Current consumption (max.) @ 24 VDC	RJ45 ports	Fibre optic ports**	Operating temperature
	116-5151-030.2134	FL switch LM 4TX/FX SM	380 mA	4	1 SM (SC)	-40 - 70°C
	116-5151-030.2135	FL switch LM 4TX/2FX SM	400 mA	4	2 SM (SC)	-40 - 70°C
	116-5151-030.2136	FL switch SFNB 5TX	180 mA	5	-	-10 - 60°C
	116-5151-030.2137	FL switch SFNB 8TX	138 mA	8	-	-10 - 60°C
	116-5151-030.2138	FL switch SFN 4TX/FX	140 mA	4	1 MM (SC)	0 - 60°C
	116-5151-030.2139	FL switch SFN 7TX/FX	190 mA	7	1 MM (SC)	0 - 60°C
	116-5151-030.2140	FL switch SFN 6TX/2FX	230 mA	6	2 MM (SC)	0 - 60°C
	116-5151-030.2142	FL switch SFNB 4TX/FX SM 20	185 mA	4	1 SM (SC)	0 - 60°C

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 SFN = Standard Function, Narrow housing

** MM = Multi Mode
 SM = Single Mode
 SC = Square Connector
 (Set and Click, Stab and Click, Standard Connector)

Switches and converters (cont.)

Image	Part number	Description*	Current consumption (max.) @ 24 VDC	RJ45 ports	Fibre optic ports**	Operating temperature
	116-5151-030.3001	Jetcon 1301-S single mode fibre converter	150 mA	1	1 SM (SC)	-40 - 70°C
	116-5151-030.3002	Jetcon 1301-M multi mode fibre converter	150 mA	1	1 MM (SC)	-40 - 70°C
	116-5151-030.3003	Jetcon 2502 ethernet/VDSL 2 converter	210 mA	2	–	-40 - 70°C

* SFNT = Standard Function, Narrow housing, high Temperature range

LM = Lean Managed

SFNB = Standard Function, Narrow housing, Basic entry level

SFN = Standard Function, Narrow housing

** MM = Multi Mode

SM = Single Mode

SC = Square Connector

(Set and Click, Stab and Click, Standard Connector)

Batteries

Autronica Fire and Security AS offers accumulator batteries for every Autronica fire detection system. Generally, 24 VDC back-up is used, requiring two batteries per panel. All batteries are sealed and can be placed in cabinets.

Part number	Description	Voltage	Weight	Dimensions LxWxH (mm)	Notes
116-4160-000.1065	FIAMM FG10721	6 V / 6,5 Ah	1,35 kg	151 x 34 x 94	AutroSense
116-4160-001.	FIAMM FG20721	12 V / 7.2 Ah	2,4 kg	79 x 56 x 106	
116-4160-002.	FIAMM FG21803	12 V / 18 Ah	5,9 kg	181 x 76 x 167	AutroSafe
116-4160-003.	FIAMM FG22703	12 V / 27 Ah	8,7 kg	166 x 175 x 125	
116-4160-004.	FIAMM FG24204	12 V / 42 Ah	13,8 kg	196 x 163 x 174	
116-4160-005.	FIAMM FG20201	12 V / 2 Ah	0,9 kg	178 x 34 x 65	
116-4160-005.0001	FIAMM FG21202	12 V / 12 Ah	4,0 kg	151 x 98 x 99	
116-4160-005.0002	FIAMM FG20121	12 V / 1,2 Ah	1 kg	97 x 49 x 55	WAS-2000
116-4160-005.0003	FIAMM FG20341	12 V / 3 Ah	1,41 kg	134 x 67 x 60	
116-4160-006.	FIAMM FG27004	12 V / 70 Ah	22,7 kg	350 x 166 x 174	
116-4160-006.0003	Sonnenschein A512/85	12 V / 80 Ah	31,0 kg	330 x 171 x 236	Order only

Power supply units

Part number	Description	Output voltage
116-BPS-405/BOXED	Power supply unit for AutoSafe 4	24 VDC / 5 A
116-BPS-410/BOXED	Power supply unit for AutoSafe 4	24 VDC / 10 A
116-BPS-410/115/BOXED	Power supply unit for AutoSafe 4, 115 VAC	24 VDC / 10 A
116-4550-012.2410	Power supply with fault output for all systems	24 VDC / 10 A
116-4550-004.0001	Power supply for Autoprime	24 VDC / 5 A
116-4660-055.0001	DC/DC converter SD150B	24 VDC / 6,3 A
116-8147-015.5120	Converter	110-130 VAC / 220 VAC – 200 VA
116-8147-038.5130	Converter	110-130 VAC / 220 VAC – 300 VA

Relays

Part number	Description
116-7624-030.0001	Relay PLC RSC 24 DC/21, single change-over contact
116-7624-030.0002	Relay PLC RSC 24 DC/21-21, double change-over contact
116-BSX-310	Relay kit for FARE/FWRE

Surge protection

All units for mounting on TS-35 rail

Part number	Description
116-8464-210.0230	230 VAC input. PT-2PE/S-230 AC (excluding base), 1 x per 230 VAC circuit. Approved according to IEC61643-1:1998-02. Mounting width: 17.5 mm.
116-7491-080.0001	Mounting base for 230 V protection. Protection: PT-BE/FM
116-8464-215.0024	Detector loop and 20 mA communication line, UFBK-M2-PE-24 DC-ST (excluding base). 1 release unit per circuit/loop. Mounting width: 17.5 mm.
116-7491-080.0002	Mounting base for detector-loop protection UFBKE
116-7354-009.3024	Alarm circuits and 24 VDC outputs TT-SLKK5/24 AC, 1 pc. per wire (2 pcs. per circuit).
116-7354-009.3012	Alarm lines (BMA, BMF, FARE, FWRE) TT-SLKK5/12 DC, 1 x per wire

Door magnets

Image	Part number	Description
	116-6731-017.0007	Door holding magnet w/counter plate GTR048000A07, 24V / 1,6 W / 400 N
	116-6731-017.0008	Door holding magnet w/counter plate GTR063000A07, 24V / 3 W / 1000 N
	116-6731-017.0010	Robust magnetic door release w/counter plate, 50 kg, 490 N





Loop units

– a wide range covering your basic fire detection needs

We provide a wide range of loop units for our fire detection systems. Our detectors, manual call points, I/O units, control units and alarm units are developed and approved according to European directives (CPD) requiring EN 54 compliance and other appropriate worldwide regulations.

The loop units are available both with and without SelfVerify function. SelfVerify solves all issues of manual maintenance, leaving time consuming and costly physical testing redundant. With AutoSafe SelfVerify®, the system checks all detectors, interfaces, connections and cables – from detector chamber to alarm output – every single day.

Not only does the system test whether a detector is capable of provoking

an alarm, it even verifies the sensitivity of every detector with a calibrated signal. The SelfVerify system ensures that each detector always responds to the correct alarm level. In the event of irregularities, the display on the operating panel will accurately pinpoint the source of any problem.

SelfVerify ensures that you have the safest and most reliable fire safety system available – a system ensuring optimal detection.

Input and output units

We offer a wide range of input and output units for many different applications. The system features Exn, Exia and Exd approved input and output units for high risk applications. All input and output units feature automatic addressing and short-circuit protection.

Image	Part number	Description	Configurable input	Monitored input	Monitored output	Inputs/outputs	Requires external PSU	SelfVerify	For AutoSafe only	For use in EX areas	Ingress Protection level*	Notes
	116-BN-180	AutoKeeper						•	•		IP30	Use two units to access one loop from two loop controllers. DIN rail mounting in cabinet.
	116-BN-201	Monitoring unit	•	•		1/0					IP54 IP67	For external units
	116-BN-221/01	Extinguishing control unit		•	•	2/1	•		•		IP67	
	116-BN-221/02	Output unit with 7 A relay			•	0/1	•		•		IP67	Loop controlled FAD unit
	116-BN-303	Single monitored input unit	•	•		1/0		•			IP54 IP67	Function selectable via dip switch
	116-BN-304	Input/output unit	•	•	•	1/1		•			IP54 IP67	Function selectable via dip switch

*: When two degrees of protection is given, the lowest is relevant when using the included glands. To achieve the highest, special IP67 glands must be ordered (see page 40)

Input and output units (cont.)

Image	Part number	Description	Configurable input	Monitored input	Monitored output	Inputs/outputs	Requires external PSU	SelfVerify	For AutoSafe only	For use in EX areas	Ingress Protection level*	Notes
	116-BN-305	Dual monitored input/output unit	•	•	•	2/2		•			IP54 IP67	Function selectable via dip switch
	116-BN-307	Monitored Fire Alarm Device Control Unit			•	0/1	•	•			IP54 IP67	
	116-BN-320	Interface unit	•	•		2/1		•			IP54 IP67	For AutoFlame/ AutoBeam 25/ AutoSense 200/FireRay 5000
	116-BN-320/2	Door control unit		•		2/1		•			IP54 IP67	
	116-BN-320/4	Standard control unit		•		2/1		•			IP54 IP67	Control of external equipment
	116-BN-320/5	Monitoring unit		•		1/0		•			IP54 IP67	For sprinklers

*: When two degrees of protection is given, the lowest is relevant when using the included glands. To achieve the highest, special IP67 glands must be ordered (see page 40)

Input and output units (cont.)

Image	Part number	Description	Configurable input	Monitored input	Monitored output	Inputs/outputs	Requires external PSU	SelfVerify	For AutoSafe only	For use in EX areas	Ingress Protection level*	Notes
	116-BNB-330A	Loop adapter unit for conventional loops		•		1/1	•	•	•		IP67	Replacement unit for BNB-330 in existing AutoSafe 3 systems
	116-BNB-331	Loop adapter unit for conventional loops		•		1/1	•	•			IP67	AutoSafe ver. 4.4.1 → Autroprime ver. 2.0 →
	116-BN-500/EX	Input unit	•	•		1/0		•		•	IP54 IP67	For interfacing external units, clean contacts, alarm relays, etc. Zones 0, 1 & 2
	116-BN-500/N	Input unit	•	•		1/0		•		•	IP54 IP67	For interfacing external units, clean contacts, alarm relays, etc. Zone 2
	116-BN-505/EXD	Input unit with BNB-300	•	•		1/0		•		•	IP66	Zones 1 & 2 only





*: When two degrees of protection is given, the lowest is relevant when using the included glands. To achieve the highest, special IP67 glands must be ordered (see page 40)

Detectors



We offer a wide range of detectors for many different applications, with or without SelfVerify. The following series are available:

- 200 Series, standard interactive addressable detectors.
- 300 Series with SelfVerify, interactive addressable detectors.
- 500 Series with SelfVerify, interactive addressable detectors for use in demanding environments.

The system also offers Exn and Exia approved versions of detectors designed for use in high risk applications. S Series smoke detectors are specially designed for applications where high sensitivity is required.

Image	Part number	Heat	Smoke	MultiSensor	SelfVerify	Including base	Environmentally sealed	For use in EX areas	For EX zone 2 only	High sensitivity	Sealed unit	Wet/dry areas	Ingress Protection level	Notes	
	116-5861-033.0150	•			•		•					W/D	IP65	SWM-1KL 140°C	
	116-BD-200M	•				•	•					•	W	IP56	For steam saunas/cold stores (-30 °C)
	116-BD-501	•			•	•	•					•	W	IP56	
	116-BD-501/EX	•			•	•	•	•				•	W	IP56	
	116-BD-501/N	•			•	•	•		•			•	W	IP56	
	116-BD-505/140EXD	•			•	•		•				•	W	IP66	60 °C, non-configurable class, explosion proof
	116-BD-505/160EXD	•			•	•		•				•	W	IP66	70 °C, non-configurable class, explosion proof
	116-BD-505/190EXD	•			•	•		•				•	W	IP66	90 °C, non-configurable class, explosion proof
	116-BDH-200	•											D	IP44D	
	116-BDH-300	•			•								D	IP44D	
	116-BDH-500/EX	•			•		•	•						IP44D	
	116-BDH-500/N	•			•				•					IP44D	

Detectors (cont.)






Image	Part number	Heat	Smoke	MultiSensor	Including base	SelfVerify	Environmentally protected	For use in EX areas	For use in EX zone 2 only	High sensitivity	Sealed unit	Wet/dry areas	Ingress Protection level	Notes
	116-BHH-200		•										IP44D	
	116-BHH-300		•			•							IP44D	
	116-BHH-500/EX		•			•	•	•					IP44D	
	116-BHH-500/N		•			•	•		•				IP44D	
	116-BHH-500/S		•			•	•			•			IP44D	
	116-BHH-500/S/Ex		•			•	•	•		•			IP44D	
	116-BHH-500/S/N		•			•	•		•	•			IP44D	
	116-BHH-220			•									IP44D	
	116-BHH-320			•		•							IP44D	
	116-BHH-520/EX			•		•	•	•					IP44D	
	116-BHH-520/N			•		•	•		•				IP44D	

Manual call points / release stations

AutoSafe offers a wide range of manual call points for different applications, every unit features SelfVerify.
Two main series are available:

- 300 Series with SelfVerify, interactive addressable manual call points.
- 500 Series with SelfVerify, interactive addressable manual call points for use in demanding environments.

The system features Exn and Exia approved versions for high risk applications.

Image	Part number	Description	For use in EX areas	Zone 2 only	Watertight / outdoor model	Extreme environments	LED indicator	Metal connection box	Glass NOT included	Optional duty label*	Degree of protection
	116-BF-300V2	Manual call point					•				IP42D w/o cover IP44D w cover
	116-BF-510WP-H	Manual call point			•	•	•				IP52 w/o cover IP55 w cover
	116-BF-510WP-HM	Manual call point, cable glands pre mounted, robust mounting plate.			•	•	•				IP52 w/o cover IP55 w cover
	116-BF-500V2/EX	Manual call point	•								IP44D**
New design 2016	116-BF-500/N	Manual call point		•					•		IP44D**
	116-BF-501	Manual call point			•	•					IP66
	116-BF-501/EX	Manual call point	•		•	•					IP66
	116-BF-501/N	Manual call point		•	•	•					IP66

** : Ingress Protection level, inner housing.

Manual call points / release stations (cont.)






Image	Part number	Description	For use in EX areas	Zone 2 only	Watertight / outdoor model	Extreme environments	LED indicator	Metal connection box	Glass NOT included	Optional duty label*	Degree of protection
	116-BF-502	Manual call point			•	•					IP66
	116-BF-502/EX	Manual call point	•		•	•					IP66
	116-BF-502/N	Manual call point		•	•	•					IP66
	116-BF-503/EX/0100	Manual call point	•		•	•			N/A		IP66
	116-BF-503/N/0100	Manual call point		•	•	•			N/A		IP66
	116-KIT-BF-503/EX/0300	Release station	•		•	•			N/A	•	IP66
	116-KIT-BF-503/N/0300	Release station		•	•	•			N/A	•	IP66
	116-KIT-BF-503/0400	Release station			•	•			N/A	•	IP66
	116-KIT-BF-503/EX/0400	Release station	•		•	•			N/A	•	IP66
	116-KIT-BF-503/N/0400	Release station		•	•	•			N/A	•	IP66
	116-KIT-BF-503/0500	Release station			•	•			N/A	•	IP66
	116-KIT-BF-503/EX/0500	Release station	•		•	•			N/A	•	IP66
	116-KIT-BF-503/N/0500	Release station		•	•	•			N/A	•	IP66
	116-BFG-3/XX	Glass for call point, available in several languages. Replace XX with country code. No ending = No text GB = English GB/AR = English and Arabic N/GB = Norwegian and English SU = Russian									

***Duty lables**

Part number	Text	Part number	Text
116-E-2327/1	Inergen utløsning Inergen Release	116-E-2327/26	CO2 Release station
116-E-2327/2	Brannmelder Fire alarm	116-E-2327/27	CO2 Inhibit station
116-E-2327/3	Water release	116-E-2773/1	Abandon ship
116-E-2327/4	Fire Brann	116-E-2773/2	Abandon
116-E-2327/5	Vannutløsning Water release	116-E-2773/3	Gass Gas
116-E-2327/6	Inergen press. Release	116-E-2773/4	Vanntåke
116-E-2327/7	Vannutløser Water release	116-E-2773/5	ESD 2
116-E-2327/8	Fire Monitor Water release	116-E-2773/6	CO2 release & inhibit station
116-E-2327/9	Deluge Water release	116-E-2773/7	VEEUDU KÄIVITAMINE
116-E-2327/10	Deluge release	116-E-2773/8	Argonite
116-E-2327/11	Vanntåke Water mist	116-E-2773/9	General emergency alarm
116-E-2327/12	Alarm	116-E-2773/10	Argonite Release
116-E-2327/13	Overrisling Deluge	116-E-2773/11	ESD
116-E-2327/14	Start fire pumps Старт пожарный насос	116-E-2773/12	Electrical isolation
116-E-2327/15	Vanntåke Utløsning	116-E-2773/13	MCP Ручной извещатель
116-E-2327/16	Overrisling	116-E-2773/14	ESD AB. OCT.
116-E-2327/17	Fire Push button	116-E-2773/15	CO2 Manual station abort
116-E-2327/18	General Alarm	116-E-2773/16	CO2 Manual station release
116-E-2327/19	FM200 release	116-E-2773/17	Manual alarm call point
116-E-2327/20	FM200 inhibit	116-E-2773/18	Extinguishant release pushbutton
116-E-2327/21	Fire	116-E-2773/19	East monitor actuation
116-E-2327/22	Water mist release	116-E-2773/20	West monitor actuation
116-E-2327/23	Start Firewater pump	116-E-2773/21	Foam system release
116-E-2327/24	Start Foam skid	116-E-2773/22	Vannutløser Deluge release
116-E-2327/25	Clean Agent release		






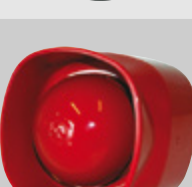
Control units

For the fire detection systems, Autronica offers control units for enabling and disabling of detectors, as well as daytime/nighttime units. Available in several language versions. Replace XX with country code.

Image	Part number	Description	Number of buttons	For external control	Configurable delay	For AutoSafe only	Ingress Protection level	Notes
	116-BW-200/XX	Disabling unit	2		•		IP66	Available in Swedish, English and Russian
	116-BW-201/XX	Disabling unit	0	•		•	IP66	Available in Swedish and English
	116-BW-202/XX	Daytime/Nighttime unit	2		•	•	IP66	Up to two units can be powered from detector loop. To connect more units, external 24 VDC power is required. Available in English only.
	116-BW-203/XX	Daytime/Nighttime unit	0	•		•	IP66	Up to two units can be powered from detector loop. To connect more units, external 24 VDC power is required. Available in English only.
	116-BU-200	Alarm controller unit	2			•	IP66	

Alarm units

Autronica Fire and Security offers a wide range of alarm units for mounting on detection loops or dedicated alarm outputs.

Image	Part number	Description	Alarm output mounting	Loop mounting	Electronic	Signal presets	Configurable	Watertight	Sound	Light	Sound output (dBA/1 m)	Cov.Vol.Code EN 54-23	Ingress Protection level	Notes
	116-BBL-100	Addressable alarm indicator		•						•	-	-	IP32C	
	116-BBL-100/IP	Addressable alarm indicator		•				•		•	-	-	IP65	
	116-BBR-7M	Conventional alarm bell 6"	•						•		93	-	IP55	
	116-BBR-24	Conventional alarm bell 6"	•						•		91	-	IP42	
	116-BBR-130	Addressable base sounder		•	•		•				90	-	IP32C	Combined detector base and addressable sounder.
	116-BBR-230	Addressable sounder		•			•		•		100	-	IP32C	

*: Slow whoop version available. When ordering, place /NL behind the article number.







Alarm units (cont.)

Image	Part number	Description	Alarm output mounting	Loop mounting	Electronic	Signal presets	Configurable	Watertight	Sound	Light	Sound output (dBA/1 m)	Cov.Vol.Code EN 54-23	Ingress Protection level	Notes
	116-BBR-230/IP	Addressable sounder		•			•	•	•		100	-	IP65	
	116-BBQ-130	Addressable base sounder w/ alarm indicator		•			•		•	•	90	-	IP21C	Combined detector base and addressable sounder/ alarm indicator.
	116-BBQ-230	Addressable sounder/ alarm indicator		•			•		•	•	100	-	IP32C	
	116-BBQ-230/IP	Addressable sounder/ alarm indicator		•			•	•	•	•	100	-	IP65	
	116-BU-47	Conventional alarm indicator	•							•	-	-	IP30	
	116-7770-009.0000	Askari conventional sounder	•		•	•		•	•		68-106	-	IP54	

Alarm units (cont.)

Image	Part number	Description	Alarm output mounting	Loop mounting	Electronic	Signal presets	Configurable	Watertight	Sound	Light	Sound output (dBA/1 m)	Cov.Vol.Code EN 54-23	Ingress Protection level	Notes
	116-7770-009.0001	Askari conventional sounder	•		•	•		•	•		68-106	-	IP54	
	116-7770-009.0002	Roshni LP conventional sounder, shallow base	•		•	•		•	•		102	-	IP54	
	116-7770-009.0004	Roshni LP conventional sounder, shallow base	•		•	•		•	•		102	-	IP54	
	116-7770-009.0005	Roshni conventional sounder, deep base	•		•	•		•	•		102	-	IP65	
	116-7780-004.0001	Flashni conventional sounder/beacon, shallow base	•			•		•	•	•	101	-	IP54	
	116-7780-004.0002	Flashni conventional sounder/beacon, deep base	•			•		•	•	•	101	-	IP65	

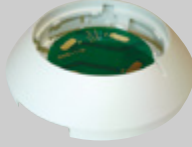
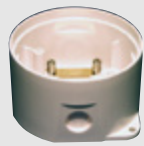
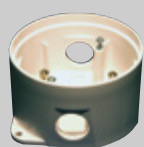



Alarm units (cont.)

Image	Part number	Description	Alarm output mounting	Loop mounting	Electronic	Signal presets	Configurable	Watertight	Sound	Light	Sound output (dBA/1 m)	Cov.Vol.Code EN 54-23	Ingress Protection level	Notes
	116-7780-004.0004	Flashni conventional sounder/beacon, shallow base	•			•		•	•	•	101	–	IP54	For Qatar only
	116-4340-003.4001	Signal light BLG-LED	•		•	•	•	•		•	–	–	IP67	
	116-4340-006.0201	Xenon conventional beacon	•		•					•	–	–	IP55	
	116-4340-006.0924	Solex conventional beacon, shallow base	•		•			•		•	–	–	IP54	
	116-4340-006.0925	Solex conventional beacon, deep base	•		•			•		•	–	–	IP54	
	116-4340-006.0926	Solex conventional beacon, shallow base	•		•			•		•	–	–	IP54	

Alarm units (cont.)

Image	Part number	Description	Alarm output mounting	Loop mounting	Electronic	Signal presets	Configurable	Watertight	Sound	Light	Sound output (dBA/1 m)	Cov.Vol.Code EN 54-23	Ingress Protection level	Notes
	116-4340-007.0001	Solista LX conventional beacon, wall mounted , deep base	•		•	•		•		•	-	W-2.4-7.5	IP65	Red flash
	116-4340-007.0002	Solista LX conventional beacon, ceiling mounted, shallow base	•		•	•	•			•	-	C-3-7.5	IP33C	Red flash
	116-4340-007.0005	Symphoni LX WP conventional base beacon, wall mounted	•		•	•	•	•		•	-	W-2.4-7.5	IP66	Red flash
	116-7770-009.0040	Symphoni IP66							•		100	-	IP66	For use with 116-4340-007.0005
	116-4340-007.0007	Solista LX wall, shallow base	•		•	•	•			•	-	C-3-7.5	IP33C	Red flash
	116-4340-007.0008	Symphony G1 LX, wall	•		•	•	•			•	100	W-2.4-7.5	IP21C	Red flash
	116-4340-007.0009	Symphony G1 LX, wall	•		•	•	•			•	100	W-2.4-7.5	IP21C	Red flash

Accessories for loop units

Image	Part number	Description
	116-BWA-100	Base for interactive detector heads
	116-BWB-110	Base adapter for analogue addressable detectors mounted on interactive loops
	116-BWP-100/20	Drip proof conduit box with 2 x M20 cable glands (4 x lock outs)
	116-BWP-100/25	Drip proof conduit box with 4 x lock outs for M25 glands
	116-BWP-143A	Ventilation duct adapter, for interactive systems
-	116-BJ-358/100	Pipe kit, L=100 mm
-	116-BJ-358/150	Pipe kit, L=150 mm
-	116-BJ-358/300	Pipe kit, L=300 mm
-	116-BJ-358/550	Pipe kit, L=550 mm
-	116-BJ-358/800	Pipe kit, L=800 mm
-	116-BJ-358/1000	Pipe kit, L=1000 mm
	116-BWP-145	Heated detector base
-	116-8142-983.5115	Transformer 230/48 V for up to 10 BWP-45/BWP-145
	116-BZ-500	Galvanic barrier for Exia-approved detectors, for mounting in field. If power to the unit is supplied from the panel, a 24 V DC/DC converter, e.g. 116-4660-055.0001 (page 21) must be used to regulate the power.

Accessories for loop units (cont.)

Part number	Description
116-WBW-100	Bypass unit for BWA-100
116-WBW-101	Mounting plate for false ceilings
116-WBJ-140	Installation/extraction tool for AutoSafe detectors
116-4860-011.0100	Cover for manual call point BF-300V2
116-CXBZ	Bezel for manual call point BF-300V2, flush mounting
116-4860-011.9901	Key for manual call point BF-300V2 and BF-510WP-H (10 pack).
116-4890-021.0001	Lift flap in polycarbonate for manual call point 116-BF-502, all versions
116-4890-021.0010	Lift flap in stainless steel for manual call point 116-BF-502, all versions
116-4890-022.0001	Lift flap in polycarbonate for manual call point 116-BF-501, all versions
116-4890-022.0010	Lift flap in stainless steel for manual call point 116-BF-501, all versions
116-BW-240	Deep mounting plate for base sounder
116-6550-125.0075	Spacer for open installation of BBR-110 alarm unit
116-6571-011.1920	Cable gland M20-1.5 for Ingress Protection level IP67 for I/O units. NB! Order with 116-6531-006.1920
116-6531-006.1920	Backnut for cable gland IP67. NB! Order with 116-6571-011.1920
116-7770-009.0008	Power base 230V for Roshni alarm unit

Test/measuring equipment

Part number	Description
116-WBJ-5/01	Test gas dispenser for smoke detectors, excluding pole
116-WBJ-5/02	Telescopic pole, 1,26 m to 4,5 m. 1,8 kg.
116-WBJ-5/03	Expansion pole, 1,13 m. 0,5 kg
116-WBJ-5/04	Test gas for smoke detectors
116-WBJ-6/01	Heat detector test kit, battery operated, 2 x batteries and charger included (for WBJ-5/02)
116-WBJ-10	Testifire smoke/heat detector test kit (head unit 2 x battery baton and fast charger)
116-WBJ-10/01	Testifire smoke/heat head unit
116-WBJ-10/02	Smoke capsule for WBJ-10 (6 pack)
116-WBJ-10/03	Solo 760 battery baton
116-WBJ-10/04	Solo 725 universal fast battery charger





One supplier
– total fire safety

Detectors for special requirements

Completing your fire detection system

Some situations or applications demand a little more from the fire detection system. For these, Autronica deliver custom solutions with special detectors

Aspirating detectors function by sampling air via a network of pipes, sampled air is passed through a dust filter and into a detector chamber where the air is analysed for traces of smoke. The detectors are capable of detecting the small amounts of smoke that are generated in the initial phases of a smouldering fire, ensuring the earliest possible warning of a potential fire while distinguishing real smoke from dust and pollutants, reducing unwanted alarms to a minimum. Every detector is "trainable" for the specific environment in which it is installed. Typical applications include laboratories, large open spaces, corrosive environments, archives/historical buildings and industrial areas.

Flame detectors are especially suitable for use in connection with the general protection of large open areas where spreading of flames are expected to happen very quickly. They detect radiation from fires, the detection based on infrared radiation (IR radiation). Typical applications are large open areas, such as atria, aircraft hangars and shopping centres as well as storage rooms for flammable substances.

Beam detectors are used in large open areas instead of a quantity of point smoke detectors. The detector protects a given area by sending signals (infrared light beam) between a transmitter and receiver, and detect dimmer or changes in frequency by heat or smoke. Beam detectors are suited to applications in open spaces where costs associated with point smoke detectors would be prohibitive. Typical applications include warehouses, hotels, hospitals, schools, public buildings, etc.

Aspirating detectors

The AutoSense series are stand-alone detectors, but can also be connected to fire alarm panels. These are highly sensitive detectors with patented "artificial intelligence" (ClassiFire), which means they are able to adapt to any environment regarding optimal sensitivity, alarm limits and minimum unwanted alarms.

Image	Part number	Description	Sensitivity (obsc./m)	Max. length piping	Max. coverage (FG)	Max. coverage BS6266 (Hot Wire Test)	Sampling pipe inlets	Max. sampling holes	Alarm levels	Programming	Relays
	116-5861-018.2000	AutoSense 200	0,0015–25%	200 m	2000 m ²	500 m ²	4	100	4	Man./ via PC	5
	116-5861-018.1406	AutoSense Micra 10, Swedish version	0,0015–25 %	50 m	800 m ²	50 m ²	1	10	4		2
	116-5861-018.1407	AutoSense Micra 10, English version									
	116-5861-018.1007	AutoSense Micra 25	0,0015–25%	25 m	450 m ²	450 m ²	1	10	1	Via PC	2
	116-5861-018.1107	AutoSense Micra 100	0,0015–25%	100 m	1600 m ²	500 m ²	2	50	1	Via PC	2
	116-5861-018.1500	AutoSense Cascade Display Module									
	116-5861-018.1501	AutoSense Cascade	0,0015–25 %	100 m			1	50	4	Man./ via PC	3

Recommended interface unit for AutoSense 200 is BN-305, see "Input and output units" on page 25.







Recommended interface unit for AutoSense Micra is BN-303, see "Input and output units" on page 25.

Recommended interface unit for AutoSense Cascade is BN-30, see "Input and output units" on page 25.

Accessories

Part number	Description
116-5861-018.2110	AutoSense command module w/o PSU
116-5861-018.4110	AutoSense Micra relay card w/inputs
116-5861-018.3051	AutoSense wire burn unit
116-5761-018.3422	AutoSense air heater
116-5861-018.9027	AutoSense 200 dust filter
116-5861-018.9028	AutoSense Micra 25 and 100 dust filter
116-5861-018.9999	Cable for "hot wire" test (roll @ 100 m)
116-XJA-030	Programming cable for AutoSense Micra
116-5861-964.0008	25mm female/3/4" male adapter red
116-BW-75/04	Condensation bottle
116-BW-75/06	Filter
116-BWP-144	Detector housing for sampling pipes with detector base BWA-100
116-E-2446/2	Label for sampling pipe "Warning"
116-5861-966.0009	Smoke pellets
116-5861-966.0010	Smoke matches

Piping 3/4" (27 mm) – halogen free

Image	Part number	Description
-	116-5862-001.0025	Water hose in coil, 25 mm PE50 NT10. Please specify desired length: 50 or 300 meters
	116-5861-910.0027	Straight pipe L = 3 m
	116-5861-914.1027	Joining socket
	116-5861-964.0001	T-piece
	116-5861-915.1027	Socket union, red
	116-5861-962.0001	Normal bend 45°
	116-5861-912.0027	Normal bend 90°

Piping 3/4" (27 mm) – halogen free (cont.)

Image	Part number	Description
	116-5861-964.0002	End cap
	116-5861-965.0001	Adapter 27 mm - 25 mm, female/male
	116-5861-965.0002	Adapter 27 mm - 25 mm, female/female
	116-5861-964.0008	Adapter 25 mm - 27 mm, female/male
	116-5861-922.0004	T piece for capillary
	116-5861-964.0004	Plane test point with 10 mm adapter, 90°
	116-5861-922.0007	Discreet capillary sampling point, 10 mm

Piping 3/4" (27 mm) – halogen free (cont.)

Image	Part number	Description
	116-5861-910.0078	10 mm capillary tube
	116-5861-018.9021	Capillary sampling point kit flush
	116-5861-935.0002	Solvent cement 250 ml w/brush
	116-5861-922.0001	Test point, plane shape
	116-5861-922.0010	Sampling hole warning label
	116-5861-964.0006	Pipe clip
	116-5861-966.0001	Compression adapter 27 mm / 10 mm



Piping 3/4" (27 mm) – halogen free (cont.)

Image	Part number	Description
	116-5861-966.0002	Compression adapter T 27 mm / 10 mm
	116-5861-966.0003	ABS test point
	116-5861-966.0004	Glass condensation trap
	116-5861-966.0005	Flexible connector 30 cm
	116-5861-966.0006	Flexible connector 100 cm
	116-5861-966.0007	Condensation trap with valve
	116-5861-966.0008	Self bilging condensation trap

Flame detectors

The AutoFlame IR Flame Detector is a point flame detector for detection of fires involving combustion of carbonaceous materials. It has a high IP rating making it suitable for the harshest environments.

The dual IR flame detector is used in various applications in which risk to personnel is high and where fire might result in a large loss of equipment. Beyond critical life-safety concerns, the advanced signal processing and DYFI+ intelligence ensure that the detector has a high immunity to any nuisance alarm source and makes this detector the obvious choice for demanding applications.

Image	Part number	Description	Housing	Degree of protection	Notes
	116-BG-201	AutoFlame interactive	PCB	IP66/67	
	116-BG-21	AutoFlame conventional	PCB	IP66/67	
	116-5861-010.2010	601FEX-M IR	FR110	IP20	For indoor use only



Accessories

Part number	Description
116-BG-201MRK	Replacement kit for 601F Flame Detector
116-001680-001	K1003A1006 Window cleaner for flame detectors (6 pcs.)
116-003996-001	UV/IR window cleaner kit
116-5861-010.2013	Ex detector base for 601FEX-M
116-5861-010.2014	Deckhead mounting kit for series 601 flame detectors

Test equipment





Part number	Description
116-006439-004	W8067S Long range test lamp (non-EX)
116-004000-006	W867C Portable test lamp 220 V

Beam detectors

Image	Part number	Description	Detection distance	Ingress Protection level	Notes
	116-5861-023.5101	FireRay 5000-101 system Auto aligning infrared optical beam detector. 1 x detector head, 1 x system controller, 1 x reflector	5 – 50 m	IP54	
	116-5861-023.5102	FireRay 5000-102 system Auto aligning infrared optical beam detector. 1 x detector head, 1 x system controller, 4 x reflectors	50 – 100 m	IP54	
	116-5861-023.3000	FireRay 3000-101 End to end infrared optical beam smoke detector system. Transmitter, receiver and compact low-level controller.	5 – 120 m	IP54	Will be released in 2015

Recommended interface unit for FireRay 5000 is BN-303 or BN-305, see "Input and output units" on page 25.

Accessories

Image	Part number	Description
	116-5861-023.5002	FireRay 5000-002: For 50 m – detector head and 1 x reflector
	116-5861-023.5039	FireRay 5000-03: For 100 m – detector head and 4 x reflector
	116-5861-023.5003	FireRay 5000-003: System controller
	116-5861-023.5005	FireRay 5000-005 Universal bracket for use with FireRay 5000 detector head or reflector mounting plate

Accessories (cont.)

Image	Part number	Description
	116-5861-023.5006	FireRay 5000-006: Surface mounting plate for 1 or 4 reflectors
	116-5861-023.5007	FireRay 5000-007: Mounting plate for 4 reflectors for use with bracket FireRay 5000-005 Image shows plate mounted on bracket, with reflector
	116-5861-023.5008	FireRay 5000-008: Mounting plate for 1 reflector for use with bracket FireRay 5000-005 Image shows plate mounted on bracket, with reflector
	116-5861-023.5004	50-100 m kit for FireRay 5000, consisting of 3 reflectors. Included in FireRay 5000-102
	116-5861-023.1018	Protection cage for FireRay 5000
	116-5861-023.3001	FireRay 3000-015: Pair of detectors (transmitter and receiver) for use with FireRay 3000 system
	116-5861-023.3002	FireRay 3000-201: Adjustment bracket for use with FireRay detectors



AutroXT extinguishant control system

Reliable fire protection

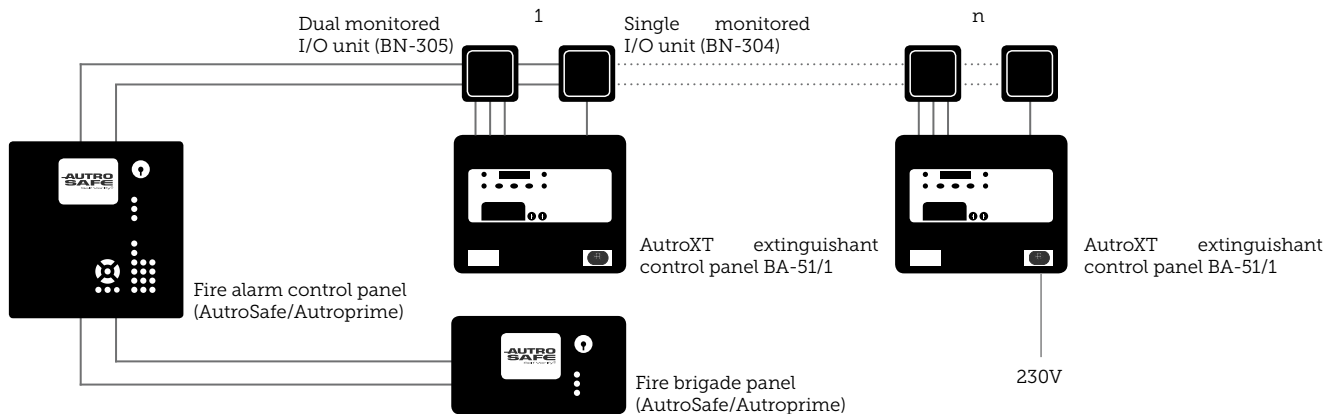
AutroXT extinguishant control panel BA-51/1 is a standard-compliant panel that – when used together with Autronica’s interactive fire detection systems AutoSafe 4 or Autoprime – enables automatic extinguishant release in critical areas where a fire would be catastrophic, like power plants, computer rooms, switchboard rooms or engine rooms.

The extinguishant control panel has two fully monitored inputs for connection to fire detection control equipment or addressable control modules to provide an EN 12094-1 compliant extinguishant control system.


Its many programmable features and extensive range of inputs and outputs

make the BA-51/1 suitable for all extinguishing applications where a fully featured control device is required.

The AutroXT extinguishant control panel BA-51/1 is connected to the AutoSafe 4 / Autoprime fire alarm control panel via two I/O units, each panel covering one zone.



Panels

Image	Part number	Description
	116-BA-51/1/GB	Extinguishant control panel, 1 zone., English text
	116-BA-51/1/I	Extinguishant control panel, 1 zone., Italian text
	116-KITD-BA-51	Kit including extinguishant control panel BA-51/1, dual monitored input unit BN-305 and single monitored input unit BN-304. Please specify language when ordering.



AutoMaster
- easy to use,
provides full overview
and saves valuable time

AutoMaster presentation system

A fully integrated safety and emergency management system

The AutoMaster is an integrated safety and emergency management system combining the strengths of a powerful fire detection system with control and monitoring functions dedicated to make sure you are in control in case of an emergency.

Graphical user interface

The AutoMaster provides an intuitive control and monitoring interface built to save valuable time when every second counts. Status information is displayed in real-time with easy-to-understand graphical representation. Navigation is fast and instinctual and the powerful zoom functions allow you to monitor all areas in great detail.

AutoMaster displays values for gas density, smoke and heat in dynamic colours, making it easy to perform the necessary actions during emergencies.

Interoperability

Control and monitoring of third party systems can easily be performed via serial protocols or network interfaces. They provide connection to basically any source – network time servers, telephone systems for text messaging, public address systems for automated voice messaging, emergency lights, access control systems, CCTV, automation systems and so on.

Logging and reporting

The AutoMaster keeps track of all events in the system and has a built-in report generator. This provides a cost-effective system log for maintenance and documentation purposes.

Decision-making tools

In high-risk environments around the world, a seemingly innocuous fire can quickly escalate into an emergency of large proportions. When disaster strikes and you only have seconds to make the proper decisions, the right safety and emergency management system is an invaluable asset. The AutoMaster includes a Decision Support System (DSS) that will help you make the right decisions at the right time.

AutoMaster editions

AutoMaster ISEMS is the complete AutoMaster edition, including all functionality. In addition, we offer a market specific edition with the modules most relevant for the onshore market

Modules/functions	AutoMaster - onshore edition	AutoMaster - ISEMS
Basic functionality		
Fire management basic functions	•	•
MultiSensor control	•	•
Report generator	•	•
Control and monitoring of emergency lights/LLL	•	•
Extended functionality		
AutoSafe IFG unit support	NA	•
Touch screen support	•	•
Decision support system/incident manager		•
Electronic plotting table		•
Training/simulation module		•
Event record and replay module		•
Video module (live video support CCTV)		•
Remote connect function		•
Message centre module		•
Interfaces		
Hernis CCTV interface		•
System-S interface		•
NMEA interface		•
VDR output		•
MODBUS interface	•	•
ESPA 4.4.4 interface	•	•

Software licences

Part number	Description
116-PROG-AUTROMASTER-ONS	AutoMaster Onshore Edition – Provides extensive fire detection and alarm management functions. Customers have the freedom to add dedicated software modules to expand the functionality according to their needs.
116-PROG-AUTROMASTERISEMS	AutoMaster ISEMS – Provides the full range of functionality – every possible add-on module is included in this package, making it the perfect choice for demanding applications and professional customers.
116-PROG-AM-UPGRADE	Upgrade of AutoMaster to most recent version – Existing AutoMaster customers can upgrade their license to the most recent version of AutoMaster. Requires change of AutoMaster configuration data.

Software modules

Part number	Description
116-PROG-AM-MOD-DSS	Decision Support System (DSS) – An interactive incident management system for AutoMaster. The DSS gives operators access to customer-specified checklists. The checklists are organized as checkpoints with one or more action items that can be used to manage operations, and these can be marked off as actions are completed.
116-PROG-AM-MOD-EPTABLE	Electronic fire control plotting table – gives you a dynamic plotting table to keep track of actors events during an emergency or drill. All EPT activity is logged in the Decision Support System and is available for later reviews.
116-PROG-AM-MOD-TSIM	Training/Simulation module – A tool to simulate pre-configured events. During a simulation it is possible to pause, stop/end, and continue the simulation. Running the simulation tool is similar to running a live event, alarms and faults are acknowledgeable and resettable. Every event is logged, and after a simulation (or a stop), a full log can be created and it is possible to replay the simulation using the Event record/replay module.
116-PROG-AM-MOD-EVENT	Event Record/Replay module – Offers a screenshot-based replay of incidents on AutoMaster and can be configured to start recording manually or on pre-configured events as pre-warning, alarm or simulation. Recordings are available for replay, and under replay the operator can start, stop, pause, fast-forward and fast backwards. It is possible to export stored events.
116-PROG-AM-MOD-VIDEO	Video interface module – Includes display of live video in AutoMaster from IP based video cameras.
116-PROG-AM-MOD-REMOTE	Remote Connect function – The Remote Connect Module enables a remote connection to AutoMaster from any location using a server/client technology.
116-PROG-AM-MOD-MC	Message Centre module – In the Message Centre the user can send text messages to telephone systems and other AutoMaster PCs. The user can also send pre-recorded voice messages to PA systems. Requires ESPA 4.4.4. interface.

Interface modules

Part number	Description
116-PROG-AM-MOD-HERNIS	Hernis CCTV interface – Interface enables use of AutoMaster together with video cameras and servers from Hernis.
116-PROG-AM-MOD-NMEA	NMEA interface – A protocol used for interface in between maritime electronic equipment, and AutoMaster has built-in support for this in the NMEA interface module. Interface towards GPS is the most common application.
116-PROG-AM-MOD-VDROUTPUT	VDR output – Used in maritime applications for giving output to the Voyage Data Recorder. Configuration of which data and status messages to send to the VDR is done by project engineering.
116-PROG-AM-MOD-MODBUS	MODBUS interface – With the MODBUS interface AutoMaster can be connected to almost any kind of electronic equipment for monitoring and control.
116-PROG-AM-MOD-ESPA444	ESPA 4.4.4 interface – Offers a serial protocol intended for the interconnection of paging equipment with telephone exchanges or computer systems. The protocol used is message-based and is built upon the ISO1745 transport specification. Required if Message Centre module is used.

Software hardcopies

Part number	Description
116-AUTROMASTER-ONS-CD	AutoMaster ONS back-up CD without license
116-AUTROMASTERISEMS-CD	AutoMaster ISEMS back-up CD without license

Engineering/Configuration

Part number	Description
116-AM-CONFIG	General configuration work on setup of AutoMaster
116-AM-CHANGE	Change of AutoMaster configuration
116-PROSJAMB	Conversion of drawings into AutoMaster format
116-PROSJAMD	Adding of detectors to drawings
116-PROSJAMDF	Adding of color fill for analog values

Hardware

Part number	Description
116-AUTROMASTER-PC-11	PC, desktop version, convertible minitower. Model subject to change without prior notice.
116-AUTROMASTER-RACKPC	19" rack mount PC
116-5151-020.0210	Industrial PC w/SSD
116-5151-020.1951	19" standard LCD monitor
116-5151-020.2405	24" widescreen LCD monitor
116-5760-050.2003	Laser printer, colour, network and USB
116-5151-017.0002	Keyboard - UK/English character set
116-5151-020.0400	Mouse - USB - 3 buttons
116-5151-020.0732	Network card TG-3468 10/100/1000
116-5151-020.2029	Moxa 4-port serial PCIE



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COMPONENT
AF MAC UR23-00
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AutoVoice
- only what you need to know



AutoVoice voice alarm system

getting the message across in plain language

Alarm bells and sirens only provide a warning signal. They cannot give information if the situation is a drill or a real incident, type or location of incident, and what they should do.

Clear and concise information

AutoVoice provides clear, concise information without the use of confusing and often frightening alarm bells and sirens. Our voice-alarm systems use PA (public address) technology to alert members of the public as to what the problem is and what action they need to take. A pleasant-yet-firm pre-recorded voice is broadcast over a speaker system – this can, if necessary, be replaced with live broadcast – giving clear and precise information to the public.

People will be able to distinguish drills or tests from real incidents. If an incident should occur, the public will be guided to the nearest available exit, at a safe distance from the incident itself.

Voice alarm can be integrated into the fire detection system or delivered as a stand-alone unit.

AutoVoice BR-200




AutoVoice BR-200 has all of the advanced features of a voice alarm system and a PA system. The system is module based and is fully programmable. This means that BR-200 can be tailored to specific, detailed requirements, including complete configuration of PA functionality. The system can be delivered with detailed configuration including speaker sensitivity and customer specified messages.

In large systems, AutoVoice BR-200 can be installed as a distributed system with networked communication between several panels. Rittal cabinets available on request.




Technical specifications:

- Unlimited numbers of loudspeaker zones, which can be divided into several circuits
- No upper limit to amplifier capacity
- Standard zone selection or zone group selection via panel front
- Up to 128 panel fronts and/or paging microphones with zone selection
- 4-channel technology allowing different messages to be broadcast to different zones simultaneously
- Flash memory for storage of an unlimited number of messages, both digital and analogue messages
- Automatic monitoring and troubleshooting for amplifiers, loudspeaker circuits, modules and panels
- Paging microphones with/without zone selection
- Optional connection to stand-by amplifier in the unlikely event of system failure
- Module based, extensible system
- Can be re-configured post installation

Panels and cabinets

Image	Part number	Description
	116-BR-210/01.1	Operator panel, max. 14 zone groups, with fireman's microphone
	116-BR-210/02.1	Operator panel, max. 6 zone groups, with fireman's microphone
	116-BRG-APS440	Input unit for remote connection, aluminium, horizontal

Microphones and consoles

Image	Part number	Description
	116-BRG-APS308.1	Digital microphone, 8 buttons/functions
	116-BRG-APS308.1EV	Digital microphone for evacuation system, 8 buttons/functions
	116-BRG-APS316.1	Digital microphone, 16 buttons/functions
	116-BRG-APS316.1EV	Digital microphone for evacuation system, 16 buttons/functions
	116-BRG-APS324.1	Digital microphone, 24 buttons/functions
	116-BRG-APS324.1EV	Digital microphone for evacuation system, 24 buttons/functions

Amplifiers

Image	Part number	Description
	116-BRG-BO-CD-150-EV	Digital amplifier class D, 150 W
	116-BRG-BO-CD-150-2-EV	Digital amplifier class D, 2 x 150 W
	116-BRG-BO-CD-250-EV	Digital amplifier class D, 250 W
	116-BRG-BO-CD-250-2-EV	Digital amplifier class D, 2 x 250 W







APS modules

Image	Part number	Description
	116-BRG-APS01	Input for MIC/AUX
	116-BRG-APS04	Input for remote control (APS-450)
	116-BRG-APS16.2	Input for digital microphone and panel
	116-BRG-APS19.2	Flash memory, MP3, 32 messages x 1MB
	116-BRG-APS24.1	Digital Message / Advertisement Player. Digital message player for time controlled playback of audio files.
	116-BRG-APS31.1	Output module 0 dB
	116-BRG-APS37	Digital signal processing module
-	116-BRG-SW37ANS	Ambient Noise Sensing
-	116-BRG-SW37DY	Delay
-	116-BRG-SW37EQ	Equalizer
-	116-BRG-SW37FBR	Feedback Reducer

APS modules (cont.)

Image	Part number	Description
	116-BRG-APS50	Switching/Control unit, 8 buttons
	116-BRG-APS52	Input unit, 8 contacts
	116-BRG-APS53-SEC-24-V	Input unit, 4 inputs
	116-BRG-APS59.1LAN(4)	Communication unit, LAN
	116-BRG-APS62.1	Output unit, 2 loudspeaker circuits
	116-BRG-APS64.1	Output unit, 4 loudspeaker circuits
	116-BRG-APS75	Output unit, 4 relay outputs
	116-BRG-APS90.2	Internal power supply unit 2 A, 230 V / 48 V

APS modules (cont.)

Image	Part number	Description
	116-BRG-APS177.2EV	Master network surveillance module
	116-BRG-APS177.2-EVLAN	Master network surveillance module for LAN communication
	116-BRG-APS178-16EV	Loudspeaker monitoring unit, 16 zones, uninterruptible
	116-BRG-APS178-32EV	Loudspeaker monitoring unit, 32 channels
	116-BRG-APS990	CPU unit
	116-BRG-APS990EQ	CPU unit for EQ systems

AutoVoice BR-45




AutoVoice BR-45 is a compact voice alarm system. This device is suited to small-to-medium-sized applications.

The panel is pre-configured, and is delivered complete with amplifiers, loudspeaker outputs, firefighter's microphone, back-up power supply and all necessary functionality for voice warning. The unit is delivered with an input for a music source and a microphone (which can be used for public address).

BR-45 has been developed for the European market, and has the relevant approvals including monitoring according to BS-5839.8, the toughest European norm in relation to voice alarm systems.

Technical specifications:



- Monitored 2 x 150 W amplifier
- Monitored 1 x 150 W "hot-standby" amplifier
- 4 monitored loudspeaker circuits
- 8 messages stored on monitored EEPROM
- Monitored firefighter's microphone with zone selection
- Manual control of pre-recorded messages
- Monitored external message activation
- Input for music source
- Input for external equipment 0-100 V
- Input for microphone with zone selection
- Approved acc. to EN 54-16

Image	Part number	Description
	116-BR-45	Compact voice alarm system, complete
	116-BR-210/45	Operator panel for BR-45
–	116-BRG-MC46	Adapter for 19" rack, 6U
	116-BRG-APS305.1-C6	Digital microphone with zone selection

Loudspeakers – both systems

Image	Part number	Description	Max. output (W)	dB 1W/1m (SPL)	Frequency (Hz)	Dimensions (mm)	Outdoor use	HiFi	ABS plastic	Aluminium	MDF
	116-BBR-DAL165/10PP	Cabinet speaker, EN 54 approved	10	100,6	225 - 22 200	170 x 75				•	
	116-BBR-WAL165/6PP	Cabinet speaker, EN 54 approved	6	98,2	140 - 19 700	253 x 193 x 83					•
	116-BBR-CP66/T	Cabinet speaker	6	88	180 - 18 000	270			•		
	116-BBR-DEL130/6PP	Ceiling speaker, EN 54 approved	6	99,2	310 - 14 800	180 x 130				•	
	116-BBR-DELF165/6PP	Ceiling speaker, EN 54 approved	6	100,7	380 - 22 500	220 x 110				•	
	116-BBR-GM3303EV	Ceiling speaker	8	89,2	125 - 20 000	200			•		
	116-BBR-GM3313EV	Ceiling speaker	8	90,7	80 - 20 000	230			•		
	116-BBR-DAW130/10PP	Projector speaker	10	94,3	125 - 20 000	140 x 200				•	
	116-BBR-DAW130/20PP	Projector speaker	20	108,1	130 - 20 400	140 x 365				•	
	116-BBR-DK-10/TPP	Horn speaker, EN 54 approved	10	106	380 - 9 000	142 x 207	•		•		
	116-BBR-DK-15/TPP	Horn speaker, EN 54 approved	15	108	460 - 9 000	208 x 272	•		•		
	116-BBR-DK-30/TPP	Horn speaker, EN 54 approved	30	110	400 - 7 500	238 x 302	•		•		

Loudspeakers – both AutoVoice systems (cont.)

Image	Part number	Description	Max. output (W)	dB 1W/1m (SPL)	Frequency (Hz)	Dimensions (mm)	Outdoor use	HIFI	ABS plastic	Aluminium	MDF
	116-BBR-DK-MH30/T-EN54	Music horn speaker, EN 54 approved	30	110,1	80 - 14 000	370 x 255 x 291	•		•		
	116-BBR-DK-10/T	Horn speaker	10	111,2	430 - 8 800	142 x 207	•		•		

Miscellaneous

Part number	Description
116-BRG-GM1880	Cover volume control
116-BRG-GZ928	Data cable for digital microphones and panel
116-BRG-MC03	Cassette for 8 modules
116-BRG-MC42	Adapter for 19" rack 2U
116-BRG-MC43	Adapter for 19" rack 3U



Our mission is clear,
to make the world a safer place to live in. We know how important this task is, and this drives us to constantly develop
smarter solutions.

Our pride and driving force are anchored in saving as many lives as possible, in protecting the environment and in securing property
around us. In many cases, the consequences of a fire are enormous, and we have undertaken to understand how they occur, develop
and can be fought. Our solutions must discover potential hazards in our surroundings as early as possible, without causing false alarms
and uncertainty. This is a delicate balance, and our technology must be equally optimised in large cruise ships, in nuclear power sta-
tions and on oil platforms, as in kindergartens.

A masterly exercise in which we place all our honour.
And in this way, we create the safest and most reliable fire and gas safety products in the world.

Protecting life, environment, and property

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