Product Catalogue

Fire Detection
Special Fire Detection

SECURITON
For your safety

SECURITON

Profile of a company that's young at heart

Securiton AG belongs to the Swiss Securitas Group and has been entirely at the service of technical security since its founding in 1948. With its pioneering spirit and far-sighted approach it has since developed into an acknowledged specialist for high-standard security. Many years of partnership-based co-operation with customers, consultants, official bodies and authorities are proof of the confidence in comprehensive know-how and quality. Today Securiton plans, installs and maintains systems for the security industry and defence technology - both in Switzerland and world-wide. As a competent consultant and recognised installer Securiton offers a wide selection of security systems for fire detection, burglary/hold-up alarm systems, personal protection, access control, video surveillance, property and perimeter protection.

Products

As a competent consultant and recognised installer, Securiton offers a wide choice of security sytems in the following fields:

- Fire detection
- Burglary/Hold-up alarm systems
- CCTV
- Security management systems
- Property protection

Key figures:

- Employees 769
- Founded in 1948

Membership/approvals

Securiton is a member of the SES, the Swiss Association of Installers of Security Systems. All SES members are acknowledged specialist firms for fire, burglary, hold-up alarm or extinguishing systems and are recognised as such by the Cantonal Fire Insurance Union (VKF) and certified in accordance with SES guidelines.

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Introduction

SecuriFire is a superbly adaptable life safety system, lending itself to small, medium and large building applications.

Virtually “no limits”

SecuriFire is a modular system uniquely designed to easily meet the needs of standalone installations or multi-node networked systems. A single node system supports up to 16 loop controllers with up to 250 devices per loop, depending on the loop protocol used (SecuriLine extended or standard). Up to 16 alarm panels can be networked in one sub-system. Up to 64 sub-systems can be networked to a virtually unlimited installation.

Fully Redundant - Totally Failsafe – 8 Zones Extinguishing

Consistency is the hallmark of any great organization or process. When it comes to fire detection systems, consistency is not a desired goal; it is a must. SecuriFire 3000 is the only 100% failsafe system on the market. It provides redundant processing exceeding the stringent EN54 requirements. Its full hardware redundancy and wiring flexibility are not found in any other system. The full hardware redundancy allows for eight (8) extinguishing zones per panel.

Superb User Interface

The high resolution LCD color graphics display talks your language and is designed to reduce operator interactions in critical situations and maximize design flexibility for custom systems. In addition to front panel control and annunciation, Securiton’s Universal Management System (UMS) provides desktop control and messaging in the familiar Windows environment. It gives the user access to all security installations - including fire detection, intrusion alarm, access control and CCTV – in one simple and intuitive interface.

SecuriFire Studio

A powerful System Definition Utility program helps define system operations in a fraction of the time required by previous methods. Virtually all SecuriFire operating features are software controlled. This gives SecuriFire unparalleled flexibility and ensures operational changes, expansions and upgrades will be possible with ease, even years after the initial setup.

Tested & Certified

All SecuriFire system modules are tested against EN standards and certified by VdS.

1. SecuriFire 500 fire alarm control panel

SCP 500 Cabinet

B7-SCP520 SecuriFire 500 Basic Version, with built-in operating panel

SecuriFire 500 basic version including:

- Polycarbonate cabinet (grey)
- B7-CPB11 Central Processor Unit
- Battery compartment (max. batt. size 2 x 12 V/ 7 Ah)

Technical data

Mains voltage / Frequency	: 110/230 VAC +15%/-20% 47-63 Hz
Power Consumption	: max. 90 W
Output voltage	: 26,3 VDC (+50°C) to 28,3 VDC (0°C)
Output current	: 2,5 A
Max. switching voltage	: 240 VAC / 125 VDC
Max. switching current	: 3 A
Max. switching capacity	: 300 W / 2,500 VA
Batteries (largest)	: 2 pieces. 12 V / 7 Ah in series
Protection class (DIN 40050)	: IP 30
Ambient temperature	: -5° to +50°C
Dimensions (HxWxD)	: 300 x 340 x 80 mm
VdS-Approval	: G 212112

2. SecuriFire 1000 fire alarm control panel

SCP 1000 Cabinet (key lock)

B6-SCP1020A SecuriFire 1000 Basic Version, with built-in operating panel

SecuriFire 1010A basic version including:
- Sheet steel cabinet (grey)
- DOM-cylinder lock
- B6-BCB12A Central processor unit
- B9-PSU Power supply unit (110/230 VAC)
- Power clips and battery cable
- Battery compartment (max. batt. size 2 x 12 V/17 Ah)

Technical data

Mains voltage / Frequency	: 110/230 VAC +10%/-15% 47-63 Hz
Power Consumption	: max. 160 W
Output voltage	: 26,3 VDC (+50°C) to 28,3 VDC (0°C)
Output current	: 4 A
Max. switching voltage	: 240 VAC / 125 VDC
Max. switching current	: 3 A
Max. switching capacity	: 300 W / 2,500 VA
Batteries (largest)	: 2 pieces. 12 V / 17 Ah in series
Protection class (DIN 40050)	: IP 30
Ambient temperature	: -5° to +50°C
Dimensions (HxWxD)	: 400 x 445 x 150 mm
VdS-Approval	: G 209049

3.SecuriFire 2000 units

3.1 SecuriFire 2000 fire alarm control panel

SCP 2000 Cabinet (key lock)

SCP 2030A

B6-SCP2010A Basic version

B6-SCP2020A with built-in operating panel

B6-SCP2030A with built-in operating panel and printer

B6-SCP2040A with built-in operating panel, printer and cut out for EPI devices or Ext. Zone panel

B6-SCP2050A with built-in operating panel, and cut out for EPI device

SecuriFire 2010A basic version including:

- Sheet steel cabinet (grey)
- DOM-cylinder lock
- B6-BCB13A Central processor unit
- B9-PSU Power supply unit (110/230 VAC)
- Power clips and battery cable
- Battery compartment (max. batt. size 2 x 12 V/17 Ah)

Technical data

Mains voltage / Frequency	: 110/230 VAC +10%/-15% 47-63 Hz
Power Consumption	: max. 160 W
Output voltage	: 26,3 VDC (+50°C) to 28,3 VDC (0°C)
Output current	: 4 A
Max. switching voltage	: 240 VAC / 125 VDC
Max. switching current	: 3 A
Max. switching capacity	: 300 W / 2,500 VA
Batteries (largest)	: 2 pieces. 12 V / 17 Ah in series
Protection class (DIN 40050)	: IP 30
Ambient temperature	: -5° to +50°C
Dimensions (HxWxD)	: 400 x 445 x 150 mm
VdS-Approval	: G 209047

3.2 External Indication and Operation Panels

Main Indication & Control Panel

B6-MIC711 (for RS485, non redundant)

External non redundant main indication and control panel for SecuriFire 2000.

User-friendly full operation with „SecuriWheel“ and system symbols.

Characteristics:

- For SecuriFire LAN
- 5.7“ TFT-Color Display
- Customized menus (optional)
- Operation with scroll wheel or functional keys
- 4 different languages changeable online
- Up to 1200-m distance between MIC711 and central
- Crosslinking with Ethernet protocol possibly (RX/TX)
- EPI-BUS- Interface
- Interface for external printer B5-MIC-PPE

Technical data

Operating voltage	: 22 to 30 V
Quiescent current	: 213 mA
Ambient temperature	: -5°C to +50°C
Protection class	: IP 42
Dimensions (HxWxD)	: 276 x 170 x 52 mm

3.3. SecuriFire 2000 Units / Boards

B6-NET2-FXS I/F board, 2x RS485 FXS, 2x 100Base-TX

B6-NET2-FXS

For redundant networking of SecuriFire 2000 control panels or for redundant connection of PC applications. The module consists of 3 network connectors (1x RS485 interface, 2x FXS) and one 100Base-TX interface. The module is connected to the B6-BCB13 main processor unit.

Technical data

Supply voltage	: internally via the systembus
Power consumption	: 99 mA
Ambient temperature	: -5°C to +50°C
Transmission type	: TCP/IP
Physical characteristics	: RJ-45 sockets, 8-pin
Direction	: Bidirectional, full-duplex
LAN- interfaces	: 1x Ethernet 100Base-TX

4.SecuriFire 3000 units

4.1 SecuriFire 3000 fire alarm control panel

SCP 3000 Cabinet (key lock)

SCP 3030A

B6-SCP3010A Basic version
B6-SCP3020A with built-in operating panel
B6-SCP3030A with built-in operating panel and printer
B6-SCP3040A with built in panel, printer and cut out for EPI-device
B6-SCP3050A with built in panel, printer and cut out for MMI-device

SecuriFire 3010A basic version including:

- Sheet steel cabinet (grey)
- DOM-cylinder lock
- B5-BCB15A Central processor unit
- B8-PSU Power supply unit (110/230 VAC)
- Module rack with B8-BUS backplane
- Battery compartment (max. batt. size 2 x 12 V/45 Ah)

Technical data

Mains voltage / Frequency	:	110/230 VAC +10%/-15% 47-63 Hz
Power Consumption	:	max. 280 W
Output voltage	:	26,3 VDC (min. At +50°C)
Output current	:	7,1 A
Max. switching voltage	:	230 VAC / 125 VDC
Max. switching current	:	3 A, both pins on terminals
Max. switching capacity	:	300 W / 2,500 VA
Batteries (largest)	:	2 x 12 V / 38...40 Ah
Protection class (DIN 40050):		IP 30
Ambient temperature	:	-5° to +50°C
Dimensions (HxWxD)	:	670 x 470 x 230 mm
VdS-Approval	:	G 209045

4.2 SecuriFire 3000 Boards

B5-DXI2 Loop Board, 2 Loops, SecuriLine eXtended

B5-DXI2

For connecting two addressable loops with detectors and modules featuring SecuriLine eXtended addressable loop technology to the SecuriFire 3000. Alternatively one addressable loop and two stub lines or four stub lines can also be connected.

Technical data

Power supply	: internally via the systembus
Current consumption	: appx. 35 mA typ.
Ambient temperature	: 0°C to +50°C
Elements	: 2 Loop circuits, each with max. 250 devices
Logical elements	: max. 750 per B5-DXI2
Short circuit isolator	: integrated into detectors and controller modules
Individual detector identification	: integrated as standard
Cable	: 1x2x0,8 mm shielded (Standard)
Loop length	: max. 3500 m
Max. line resistance	: 255 Ω

B8-NET-FX8 RS485 / 100Base-TX I/F board, 8x FX(S/M), 2x TX

B8-NET-FX8

For redundant networking of SecuriFire 3000 control panels or for redundant connection of PC applications. The module consists of 8 network connectors (8x GIBC FX (S/M)) and one 100Base-TX interface.
System configuration hint: The module can only be fitted in connection slot 2 in the module rack.

Technical data

Power supply	: internally via the systembus
Current consumption	: 226 mA + 30 mA per SFP
Transmission type	: TCP/IP
Physical characteristics	: individual per SFP
Direction	: bidirectional
LAN- interfaces	: Ethernet 100Base-TX
Transmission type	: TCP/IP
Direction	: Bidirectional, full duplex operation
Protection	: EMC and ESD with high-voltage capacitors
Mechanical design	: RJ-45 connector, 8-pin
Transmission type	: Differential signal

4.3 19“ Equipment

19“ Rack Version, incl. B8-PSU, B8-BUS, B8-MCB15, battery compartment

B5-STS-BGTA-SF

SecuriFire 3000A B8 Rack for mounting in a 19” standing cabinet.
Inclusive:
- B8-PSU
- B8-BUS
- B5-MCB15A
- Battery compartment B5-STS-AF

5. Indication and Operating Panels

B3-UIO Universal In/Output Module

B3-MMI-UIO

For controlling the floor plan and parallel display panels or as a remotely located input/output module for querying potential-free contacts (sprinkler systems), or also for controlling non-monitored horns, lamps, relays etc.

Technical data

Operating voltage	:	10 to 30 V
Current consumption	:	14 mA
Data transmission	:	MMI-BUS
Distance to subcontrol unit:		max. 1200 m
Connection	:	Floor plan panels, parallel indicator panels, flashing lights, sirens, horns, sprinkler systems, etc.
LED Outputs	:	64 LED outputs 2 mA
LEDs per panel	:	max. 256
Matrix Configuration	:	8 inputs with 8 outputs in an 8x8 matrix
Supply Voltage	:	+5 VDC
Current Draw	:	max. 3.3 mA
Ambient temperature	:	-5°C to +50°C
Dimensions (HxWxD)	:	160 x 105 x 20 mm
VdS-Approval	:	G200116

6. SecuriLine eXtended Modules

Single Detector I/F for alarm transmission

SDI 82X-1 (MCP or other contacts)

Addressable I/O module typically connected to Manual Call points (MCP), Pull Stations,Smoke Switches or Door monitors. For SecuriLine eXtended.

Provides 3 inputs and 1 output, freely programmable

With emergency alarm transmission.

Technical data

Operating voltage :	: 12 to 30 V
Current draw, constant	: 300 µA
Ambient temperature	: -25°C to +70°C
Dimensions (HxWxD)	: 32 x 22 x 14 mm
VdS-Approval	: G 211046

Monitored Output Module

BX-IOM

For controlling monitored devices, which are supplied with power by an external power supply (e.g. sirens etc.). The module contains a short circuite resistant montored output (suitable for continuous operation of fur a configurable pulse emmision with emission time limitation) and galvanically isolated input which can be used either as a voltage on the loop circuite is internally monitored for undervoltage.

Both the addressing of the module an the setting of its parameters, which are set seperatly for every input, are carried out using PC software via the fire alarm control panel.

Technical data

Operating voltage	: 12 to 30 V
Power consumption	: 430 µA
Signal transmission	: serial, 2 wire technology
Function	: 1 short circuit resistant monitored output; 1 optocoupler input
Connection	: screw clips, maximum 1,5 mm²
Monitored output	: Loads of 20 Ω to 1kΩ, 3 load ranges
Output current	: max. 1,3 A short circuit resistant
Quiescent current	: 1 to 15 mA can be set using software
Optokoppler input	: IM1+: 20-30V VEXT: 20-30V
Short circuit isolator	: integrated
Protection class	: IP 66 with case
Ambient temperature	: -20°C to +60°C
Rel. air humidity	: 5 to 95% without condensation
Dimensions(HxWxD)	: 67 x 67 x 20 mm with case: 94 x 94 x 57 mm
VdS-Approval	: G 210132

6. SecuriLine eXtended Modules

In-/Output Module

BX-O2I4

The BX-O2I4 has two relay outputs and four monitored inputs for polling potential-free contacts.

The individual I/O functions can be configured differently and combined so that this module can be used, for example, for the integration of fire protection flaps with feedback.

Addressing and parameter assignment for the BX-O2I4 is performed with PC software via the fire alarm control panel.

The module includes a short-circuit isolator. In the event of wire breakage or a short-circuit, this functionality ensures that the fault is localised and at the same time maintains the full operability of the addressable loop.

Technical data

Operating voltage	: 12 to 30 V
Power consumption	: typ. 630 µA
Signal transmission	: serial, 2 wire technology
Relay output	: bistable change-over contact 230 V/2 A(max. 60 W)
Monitored inputs	: for potential-free contacts
Optocoupler input	: Querying of potentially-bound signals, or external voltages from 0 to 30 VDC
Connection	: screw clips, maximum 1.5 mm²
Short circuit isolator	: integrated
Protection class	: IP 66 with case
Ambient temperature	: -20°C to +60°C
Rel. air humidity	: 5 to 95% without condensation
Dimensions(HxWxD)	: 67 x 67 x 20 mm with case: 130 x 94 x 57 mm
VdS-Approval	: G 211050

6. SecuriLine eXtended Modules

Monitored Input Module

BX-I2

For indication and monitoring of various types of acknowledgements, e.g. door contacts, fire zones, extinguishing systems, sprinkler messages, etc. The module contains 2 inputs, one for monitored and non-monitoring querying of potential-free contacts, which is suitable for processing switching states of longer than 330ms and one optocoupler input for monitoring external voltages. Both the addressing of the module and the setting of its parameters, which are set separately for every input, are carried out using PC software via the fire alarm control panel. An IP 66 protection class plastic case is used for fitting the module, which can be fitted with various diffe rent cable inlets as required.

Technical data

Operating voltage	: 12 to 30 V
Power consumption	: typ. 460 µA
Signal transmission	: serial, 2 wire technology
Function	: 1x monitored or non-monitored input 1x Optocoupler input
Connection	: screw clips, maximum 1.5 mm²
Short circuit isolator	: integrated
Protection class	: IP 66 with case
Ambient temperature	: -20°C to +60°C
Rel. air humidity	: 5 to 95% without condensation
Dimensions(HxWxD)	: 67 x 67 x 20 mm with case: 94 x 94 x 57 mm
VdS-Approval	: G 212023

Multiple Detector I/F

BX-MDI8

The BX-MDI8 has 8 monitored inputs for connecting detection zones or for polling potential-free contacts.

The module requires a redundant, external power supply for operation. Addressing and parameter assignment for the BX-MDI8 is performed with PC software via the fire alarm control panel.

The module includes a short-circuit isolator. In the event of wire breakage or a short-circuit, this functionality ensures that the fault is localized and at the same time maintains the full operability of the addressable loop.

Technical data

Operating voltage	: 12 to 30 V
Power consumption	: 450 µA
Signal transmission	: serial, 2 wire technology
Connection	: screw clips, maximum 1.5 mm²
Protection class	: IP 66 with case
Ambient temperature	: -20°C to +60°C
Rel. air humidity	: 5 to 95% without condensation
Dimensions(HxWxD)	: 80 x 151 x 20 mm with case: 94 x 180 x 57 mm

6. SecuriLine eXtended Modules

Magnetic Door holder with Door magnet support AFS 55

BX-MDH (delivered without Battery)

The BX-MDH is an electronically triggered magnetic door holder for connection to the SecuriLine eXtended. It has a permanent magnet which fixes the fire protection doors in the open state in normal operation without requiring electrical energy.

If there is a fire alarm or a fault, a brief current pulse neutralises the magnetic field and the fire protection doors close.

Technical data

Operating voltage		: 12 to 30 V
Operating current Quiescent (max.)		: 550 µA
Power consumption		: 2,1 W
Fault	: Door is open Door is closed	340 µA 120 µA
Magnetic holding area		: Ø 48 mm
Max. Holding strength		: 200N
Buffer battery Lithium (lifespan > 5 years)		: 9 V
Protection class		: IP 42
Ambient temperature		: -20°C to +60°C
Dimensions(HxWxD)		: 85 x 142 x 40 mm
Weight		: 0.6 kg

7. Addressable Detectors SecuriStar

7.1 SecuriStar SecuriLine eXtended

Multiple sensor detector, smoke, heat and carbon monoxide

CCD 573X

CCD 573X MC (available in different RAL colors)

The temperature- and CO-supported smoke sensor provides early detection of smouldering, glowing and open fires with smoke development.
- Combined smoke, heat and carbon monoxide (CO) detector according EN 54-5/7/26/29/30
- Optimal sensitivity
- False-alarm security through temperature and carbon monoxide-supported smoke alarm evaluation
- (2 different Cubus Adaptations)
- Technical CO alarm according EN 50291-1
- Adjustable technical CO pre-signal

Technical data

Operating voltage	: 7 to 31 VDC
Current consumption quiescent	: 150 µA
Current consumption	: 20 mA
Alarm indicator	: LED red
External indication	: 5 V/1 mA
Ambient temperature	: –25°C to +50°C
Protection class	: IP 44
Dimensions with base (ØxH)	: 118.8 x 67.5 mm
VdS-Approval	: G 212183

Multiple sensor detector, smoke and heat, with integrated sounder

MCD 573X-S

MCD 573X-S MC (available in different RAL colors)

Multiple sensor detector acoustic
For early detection of smoldering and open fires with and without smoke development. Single addressable.
- Multiple standard use on two parallel channels (smoke/heat) according to EN 54-5, -7 and EN 54-29
- Cubus levelling for automatique adaptation to the environment conditions
- Signature alarm for smoke and heat
- Smoke pre-signal
- Alarm threshold tracing
- Selection of heat classes according to EN 54-5; Class A1, A2, B inclusive index R and S for all 3 heat classes
- Acoustic according EN 54-3, Tonality adjustable in three variable volumes.

Technical data

Operating voltage	: 12 to 31 VDC
Current consumption quiescent	: 150 µA
Current consumption	: 20 mA
Alarm indicator	: LED red
External indication	: 5 V/1 mA
Sounder volume	: 92/81/69 dB(A)
Ambient temperature	: –25°C to +60°C
Protection class	: IP 22
Dimensions with base (ØxH)	: 118.8 x 67.5 mm
VdS-Approval	: G 213053

7.1 SecuriStar SecuriLine eXtended

Multiple sensor detector, smoke and heat

MCD 573X

MCD 573X CP (coated print, for temporarily humid areas)

MCD 573X MC (available in different RAL colors)

Combined smoke and heat detector with programmable detection behavior smoke / heat or combined.
- Dust cap included.
- self monitoring of all detector parts
- automatic smoke alarm sensitivity through CUBUS-leveling
- constant sensitivity through dust compensation
- built-in short circuit isolator
- patented “Signature Alarm” for smoke and heat
- heat detection classes A1, A2, B and indices R&S for all classes
- 100% backwards compatible to the STD531 and MCD 573

Messages
- separate alarm signalisation for smoke and heat
- 2 pre-warning levels for smoke
- warning signal for high ambient temperature
- contamination level 1 and 2

Settings via SecuriFire
- smoke and/or heat part can be temporarily disabled.
- smoke sensitivity
- programmable control output
- heat class and index

Technical data

Operating voltage	: 12 to 30 V
Current consumption quiescent	: 150 µA
Current consumption	: 20 mA
Alarm indicator	: LED red
External indication	: 5 V/1 mA
Ambient temperature	: –25°C to +60°C
Protection class	: IP 44
Dimensions with base (ØxH)	: 118.8 x 67.5 mm
VdS-Approva	: G 212183

7.2 Bases and Accessories for SecuriStar Detectors

Detector Bases (for all SecuriStar Detectors)

USB 502-6

USB 502-1

USB 502-6 (surface mounting, w/o loop contact)
USB 502-1 (surface mounting)
USB 502-2 (flush mounting)
USB 502-3 (surf. mount, for humid areas)
USB 502-4 (surf. mount. in concrete)
USB 502-5 (Socket for mounting on pipes)
USB 502-6 MC (USB 50X-6 in different RAL colors)
USB 502-6 MC (USB 50X-1 in different RAL colors)

Base for addressable and conventional SecuriStar detectors with integrated 6 wire terminal and detector fixing by means of bayonet coupling.

Technical data

Ambient temperature		: -25°C to +70°C
Protection class	: USB 502-1, 2, 4, 5 and 6	IP 44
	USB 502-3	IP 54
Dimensions (ØxHeight above surface)	: USB 502-1 or 6	118.5 x 25 mm
	USB 502-2	158 x 50 mm
	USB 502-3	123.5 x 50 mm
	USB 502-4	158 x 92 mm
	USB 502-5	118.5 x 70 mm

7.3 Addressable Ventilation Duct Detectors SecuriLine eXtended

Air duct detector base set, without detector

LKM-Set

Housing with transparent cover. For mounting ventilation duct detectors :LKM593X, LKM140, LKM150, and LKM583 on round or rectangular ventilation ducts. Including inlet and outlet pipe.

Technical data

Protection class	: IP 54
External dimensions (without pipes)	: 247 x 135 x 95 mm
Ventilation duct diameter ( )	: 20 to 100 cm
Ventilation duct side length ( )	: 15 to 100 cm
Air flow speed	: 1 to 20 m/s
VdS-Approval	: G216072, G216073, G214125

7.4 Conventional Ex/Atex approved Detectors

Multicriteria Detector, Ex-proof, ATEX100a

MMD 130 Ex-i

An intrinsically safe smoke detector for use in hazardous areas of zone 1 and zone 2 and certified to classification II 2 G Ex ib IIC T4. The MMD 130 Ex-i works in accordance with the scattered light principle and detects smouldering, glowing and open fires with smoke development at an early stage.

Technical data

Operating voltage	: 10 to 28 VDC
Current consumption quiescent	: max. 150 µA
Protection class	: IP 54
Operating temperature	: –20°C to +70°C
Dimensions with base (ØxH)	: 118.8 x 58.1 mm
Standard for explosion-hazard areas	: II 2 G Ex ib IIC T4
Ex Approval	: EPS 11 ATEX 1 346 X
VdS-Approval	: G 211094

Ex-mounting socket for surface mounting of MMD 130 EX-I, IP 54

USB 502-7 Ex-i (surface mounting, white)

Along with the MMD 130 Ex-i optical- and heat detectors, it is suitable for use in Ex zones 1 and 2.

It has no loop contact.

Technical data

Dimensions (ØxH)	: 123.5 x 50 mm
Protection class	: IP 54

Ex-mounting socket for surface mounting of MMD 130 EX-i

USB 502-8 Ex-i

Along with the MMD 130 Ex-i optical- and heat detectors, it is suitable for use in Ex zones 1 and 2.

It has no loop contact.

Technical data

Dimensions (ØxH)	: 118.5 x 25 mm
Protection class	: IP 44

8. Addressable Manual Call Points SecurLine eXtended

Manual Call Point IP 24 / IP 67

MCP 545X-1N (surface mounting)

MCP 545X-2N (flush mounting)

MCP 545X-4N (IP 67)

MCP 545X-1EN (surface mounting, without flap, non breakable activation)

The manual call point MCP 545X N is a non automatic detector for fire alarm systems for direct connection to the SecuriLine / eXtended. An alarm is triggered directly when the glass panel is broken. The alarm persists until the glass panel is replaced with a new one.

Alarm triggering is indicated by means of a red LED.

For test purposes, an alarm can be triggered by means of a test key without breaking the glass panel.

To increase the security with respect to false alarms, the MCP 545X N can additionally be provided with a sealable hinged cover.

		Technical data
Operating voltage		: 7 to 31 V
Current consumption quiescent		: 120 µA
Operating temperature		: -10°C to +55°C
Protection class	: MCP 545X-1 N, MCP 545X-2 N, and MCP 545X-1EN	IP 24
	MCP 545X-4 N	IP 67
Dimensions (HxWxD)		: MCP 545X-1 N &
	MCP 545X-1EN	93 x 89 x 61.5 mm
	MCP 545X-2 N	93 x 89 x 33.5 mm
	MCP 545X-4 N	93 x 97.5 x 73 mm
VdS-Approval		: G 210094

9. Alarm Indication Modules

9.1 Acoustical Alarm Medium

Loop Siren IP 21

BX-SOL-R (red)

BX-SOL-W (white)

Loop powered and controlled sounder for SecuriLine eXtended.
- 3 signal tones (DIN 33404, Slow Whoop and 990Hz pulsed)
- Signal tone controlled from the FACP depending on the event
- Configurable volume high/low

Technical data

Volume	: 89 dB / 99 dB (low/high volume)
Operating voltage	: 12 to 30 V
Operating current	: 2.3 mA / 4.7 mA (low/high volume)
Ambient temperature	: -10°C to +55°C
Protection class	: IP 21
Dimensions (ØxH)	: 108 x 96 mm
VdS-Approval	: G 210086

Loop Siren IP 21

B/SE 128 red (surface mounting, IP54)

B/SE 128 white (surface mounting, IP54)

B/SE 128 red (surface mounting, IP65)

B/SE 128 white (surface mounting, IP65)

B/SE 128 UP (flush mounting, only available in white)

Acoustical alarm device for fire alarm systems. Robust, reliable construction, high protection class, low power consumption.
- 28 signal tones
- 2nd tone can be activated via separate input
- IP 54 , flat profile socket
- Red and white type available

Technical data

Volume (DIN tone)	: up to 115 dB (98 dB) in 1 m distance
Operating voltage	: 24 V
Operating current	: max. 27 mA
Ambient temperature	: -40°C to +80°C
Protection class	: IP 54 or IP 65
Dimensions (ØxH)	: 101 x 81 mm
Regulation compliance	: EN 54-3
VdS-Approval	: G 200117

9.2 Optical Alarm Medium

Beacon wall mounted

BW ESDA1000RRSR (lens red, socket red, small)

The beacon visually signals an alarm according EN54-23. Two flash sequences can be set. The housing is made of plastic. The Beacons can be connected to SecuriFire via B3/B5-OM8, B4/B6-EIO, and BX-IOM.

Technical data

Operating voltage		: 17 to 60 V
Power consumption typically 24 V		: @ 0,5 Hz 20 mA @ 1 Hz 40 mA
Switch on current		: 720 mA for 3,6 µs
Flashing frequency		: 0,5 or 1 Hz
Ambient temperature		: -25°C to +70°C
Protection class		: Flat base IP 21 C Deep base IP 65
Dimensions (ØxH)	: Flat base Deep base	100 x 100 mm 100 x 122 mm
VdS-Approval		: G 214107

Combined Siren/Beacon wall mounted

SBW ESFA1000RRS (lens red, socket red, small)

The audible/optical signal transmitter is compliant with EN 54-23 and serves to signal a fire alarm audibly and optically in buildings; with an additional IP65 base it can also be used outdoors.
The signal transmitter can be mounted on the wall (category W)

Technical data

Operating voltage		: 17 to 60 V
Power consumption typically 24 V		: @ 0,5 Hz 25 mA @ 1 Hz 45 mA
Switch on current		: 520 mA for 3,6 µs
Flashing frequency		: 0,5 or 1 Hz
Protection class Flat base (Deep base)		: IP 21C (IP 65)
Operation temperature		: -10°C to+70°C
Dimensions (ØxH)	: Flat base Deep base	100 x100 mm 100 x122 mm
VdS-Approval		: G214108

Introduction

Aspirating smoke detection systems need little introduction these days: They are deployed extensively and account for more than 10% of the fire detection market in Europe. Aside from this commercial success, the aspirating technology has become the subject of the European product standard EN 54-20. This standard, in conjunction with the latest Code of Practice, will help to ensure that the reliable performance and good reputation of the technique is not eroded by unapproved and inappropriate products. It is strongly recommended that the system designer becomes familiar with these standards and codes.

EN 54-20

EN 54-20 has introduced a fire sensitivity classification system incorporating classes A, B and C. These classes assign the sensitivity at the sampling points to typical applications:

- Normal Sensitivity: The same sensitivity as normal optical point detectors (2% - 5% obsc. / m)
- Enhanced Sensitivity: Responding to smoke at concentrations between 0.8% and 2% obsc. / m.
- High Sensitivity: responding to smoke at concentrations of less than 0.8% obscuration /m.

It is important to define appropriate requirements / expectations for an aspirating smoke detection system at the earliest possible stage for assuring proper system engineering.

Code of Practice

When designing an air sampling system, considerations must be given to the requirements of relevant local Codes of Practice, Standards and Regulations that are used to govern the design of detection systems. What the designer must bear in mind is that these documents may only deal with the minimum acceptable requirements, often related to the performance of conventional point detectors. High sensitivity smoke detection systems such as the ASD 535 can offer performance far in advance of traditional detection elements and various bodies such as the Fire Industry Association (FIA) have documented the related engineering requirements in their “Code of Practice for Design, Installation, Commissioning & Maintenance of Aspirating Smoke Detector (ASD) Systems”

PipeFlow - Engineering Support at your Fingertips

Designing complex piping systems according to EN 54-20 and in line with the local Code can be challenging. Systems may easily become asymmetrical and you may require engineering tools for proper dimensioning and placing of sampling points. We have created the industry’s first and only software tool using physical airflow modelling for precise engineering of flow balanced aspirating systems. In plus, PipeFlow lets you draw your system in 3D and delivers you all documents needed for hassle-free installation, testing and commissioning.

1. Aspirating Systems

1.1. ASD Base Units

Aspirating Smoke Detector (including SSD 31)

ASD 531

The SecuriRAS ASD 531 aspirating smoke detector is designed for smaller monitoring areas and for the easiest possible handling.

The ASD 531 is equipped with a highly sensitive smoke sensor SSD 31 using a single sampling pipe network.

The housing provides the option for two expansion modules.

Commissioning and configuration is done directly on the device without any software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

Technical data

Mains voltage	: 14 to 30 V DC
Ambient temperature	: -10 °C to + 55 °C
Protection class	: IP 54
Dimensions with base (ØxH)	: 290 x 195 x 140 mm
VdS Approval	: G 215100
Standards	: EN 54-20 Class A, B and C, EN 54-27 UL 268, FM 3230

Aspirating Smoke Detector

ASD 532

The SecuriRAS ASD 532 aspirating smoke detector is designed for small to midsize monitoring areas.

The ASD 532 base unit is provided for a highly sensitive smoke sensor SSD 532 (to be ordered separately) for a single sampling pipe network.

The measured smoke level is indicated on a bar graph display.

The housing provides the option for two expansion modules.

Commissioning and configuration is done either directly on the device or via the ASD Config software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

Technical data

Mains voltage	: 14 to 30 V DC
Ambient temperature	: -20 °C to + 60 °C
Protection class	: IP 54
Dimensions with base (ØxH)	: 290 x 195 x 140 mm
VdS Approval	: G 215101
Standards	: EN 54-20 Class A, B and C, EN 54-27

1.1. ASD Base Units

Aspirating Smoke Detector

ASD 535-1 1 Sampling pipe / Detector

ASD 535-2 2 Sampling pipes / Detectors

ASD 535-3 1 Sampling pipe / Detector, 1 Smoke level display

ASD 535-4 2 Sampling pipes / Detectors, 2 Smoke level displays

The SecuriRAS ASD 535 aspirating smoke detector is designed for universal applications mainly for midsize to large monitoring areas. The ASD 535 base units provide space for 1 or 2 highly sensitive smoke sensors SSD 535 (to be ordered separately) for 1 or 2 sampling pipe networks.

The measured smoke level can be indicated on a bar graph display (models -3 and -4). The housing provides the option for four expansion modules.

Commissioning and configuration is done either directly on the device orvia the ASD Config software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

	Technical data
Mains voltage	: 10.5 to 30 V DC
Ambient temperature	: -30 °C to + 60 °C
Protection class	: IP 54
Dimensions with base (ØxH)	: 397 x 265 x 148 mm
VdS Approval	: G 208154
Standards	: EN 54-20 Class A, B and C

1.2. Smoke Sensors (SSD)

Smoke Sensor for ASD 535

SSD 535-3 Alarm Sensitivity range, 0.02% – 10% /m

The smoke sensor SSD 535 has to be ordered separately for the ASD 535.

Pre-signals can be set between 10 and 90% of the alarm threshold.

	Technical data
Sensitivity range alarm	: 0.02 %/m – 10 %/m
Sensitivity range pre-signals	: 0.002 %/m – 9 %/m
Ambient temperature	: -30 °C to + 60 °C
Dimensions (H x W x D)	: 120 x 136 x 95 mm

Smoke Sensor for ASD 531

SSD 31 Alarm Sensitivity range, 02% – 10% /m

The smoke sensor SSD 31 is pre-installed in the ASD 531 and is also available as replacement part.

3 Pre-signals are set on a fixed percentage of the alarm threshold (30/50/70%).

	Technical data
Sensitivity range alarm	: 0.02 %/m – 10 %/m
Sensitivity range pre-signals	: 0.006 %/m – 7 %/m
Ambient temperature	: -10 °C to + 55 °C
Dimensions (H x W x D)	: 120 x 116 x 95 mm

Smoke Sensor for ASD 532

SSD 532-3 Alarm Sensitivity range, 02% – 10% /m

The smoke sensor SSD 532 has to be ordered separately for the ASD 532.

3 Pre-signals can be set between 10 and 90% of the alarm threshold.

	Technical data
Sensitivity range alarm	: 0.02 %/m – 10 %/m
Sensitivity range pre-signals	: 0.002 %/m – 9 %/m
Ambient temperature	: -20 °C to + 60 °C
Dimensions (H x W x D)	: 120 x 116 x 95 mm

2. Modules and Accessories

Serial Master Module for networking of Special Fire Detectors

SMM 535

This interface connects the RS485 (over SIM 35) networked ASDs to a USB port of a PC. It is powered by the USB port.

Technical data

Power Supply	: USB powered / 5 VDC
Operating temperature	: -30°C to +60°C
Dimensions (H x W x D)	: 82 x 89 x 55 mm

Detector Box

REK 511

For the localization of a fire in a separate room, when a single ASD is monitoring several rooms. To use together with the SSD 515-Xs smoke detector. Has to be installed in every stub, which leads to a single room from the main tube.

Technical data

Operating voltage	: 18-28 VDC
Ambient temperature	: 0 °C to + 50 °C
Dimensions (H x W x D)	: 186 x 122 x 85 mm

Scattered light smoke detector for REK 511

SSD 515-1S sensitivity 1.2%/m

SSD 515-3S sensitivity 0.3%/m

The SSD 515-xS (Scattered Light Smoke Detector) is the smoke sensor for the accessory device REK 511 (full addressing) for the Aspirating Smoke Detector of the ASD and RAS product family. The SSD 515-xS operates according to the scattered light principle and is designed so that it optimally meets the specific requirements of smoke detection in association with an Aspirating Smoke Detector. The detector has alarm threshold tracking and is additionally available with various sensitivities. By choosing the appropriate detector sensitivity, application-specific detection properties of the Aspirating Smoke Detector are possible.

Technical data

Operating voltage	: 18 to 28VDC
Ambient temperature	: -20 °C to + 60 °C
Protection class	: IP 44
Dimensions (D x H)	: 80 x 56mm

3. Sampling Points

Sampling hole clip Clip x.x PA

CLIP 2.0 PA
CLIP 2.5 PA
CLIP 3.0 PA
CLIP 3.5 PA
CLIP 4.0 PA
CLIP 4.5 PA
CLIP 5.0 PA
CLIP 5.5 PA
CLIP 6.0 PA
CLIP 6.5 PA
CLIP 7.0 PA

Sampling hole on aspirating pipe (clip).Available with different diameter according to the project data.

Only for PVC and ABS pipes with 25 mm diameter.Packaging unit: 10 pieces

Technical data

Hole diameter	Type
2.0 mm	CLIP 2.0 PA
2.5 mm	CLIP 2.5 PA
3.0 mm	CLIP 3.0 PA
3.5 mm	CLIP 3.5 PA
4.0 mm	CLIP 4.0 PA
4.5 mm	CLIP 4.5 PA
5.0 mm	CLIP 5.0 PA
5.5 mm	CLIP 5.5 PA
6.0 mm	CLIP 6.0 PA
6.5 mm	CLIP 6.5 PA
7.0 mm	CLIP 7.0 PA

Sampling point with heating

HEAT 3.0 PVC red
HEAT 3.5 PVC blue
HEAT 4.0 PVC green
HEAT 4.5 PVC black
HEAT 5.0 PVC brown

To install the aspirating pipe in deep-freeze rooms to prevent the freezing of the aspirating holes. HEAT X.X is the relevant diameter for ASD PipeFlow-calculations (3.0/3.5/4.0/4.5/5.0mm)

Technical data

Pipe connection	: 25mm
Hole Diameter	**Type**
5.7 mm	HEAT 3.0 PVC
6.1 mm	HEAT 3.5 PVC
6.3 mm	HEAT 4.0 PVC
6.7 mm	HEAT 4.5 PVC
7.1 mm	HEAT 5.0 PVC

Introduction

The ADW 535 is an integrated line type heat detector with a response behaviour based on heat differential and/or maximum heat. Thanks to its self-check feature and the periodic, automatic test, the ADW 535 is particularly suitable for use in applications where the legally prescribed functional and maintenance checks cannot be performed due to the given ambient conditions or only with difficulty.

With the installation of an XLM 35 SecuriLine eXtended line module, the ADW 535 line type heat detector can be easily connected to the SecuriFire (SecuriLine eXtended) and Integral (X-Line) fire alarm systems via the addressable loop.

The response behaviour of the ADW 535 is tested in compliance with EN 54-22

- Class A1I, to GI from Firmware V01.01.14.

Application depending sensing tubes

Depending on the application, various sensing tubes are used (all of which have VdS approval):

- Copper: standard applications, property surveillance
- Stainless steel: food industry and high temperature applications
- PTFE (Teflon): standard applications, aggressive ambient conditions (e.g. chemical industry)

Powerful software tools, efficient commissioning

ADW HeatCalc is used for sketching the sensing tube system and calculating the necessary system settings. The PC tool is rounded off by the parts list and report for the plant documentation.

Diverse setting options are offered directly on the device via EasyConfig or using the comfortable ADW Config tool for perfect adaptation to existing environmental conditions
Configuration according to NFPA72, UL / FM approval.

1. Line Type Heat Detector

Line Type Heat detector

ADW 535-1

ADW 535-2

ADW 535-1 one sensing tube

ADW 535-2 two sensing tube

The SecuriSens ADW 535 line-type heat detector combines a proven functional principle with the latest developments in sensor and processor technology.

A sensing tube filled with normal air is installed in the area to be monitored. A fully electronic pressure sensor permanently records the pressure in the sensing tube and compares it with the alarm criteria.

Commissioning and configuration is done either directly on the device or via the comfortable ADW Config software tool for a perfect adaptation to existing environmental conditions.

For planning the ADW HeatCalc software allows an optimized design of any installation.

Technical data

Operating voltage	: 9 to 30 V DC
Length of sensing tube	: 115 m
Relay contact	: 50 VDC/1A (UL 30 VDC)
Ambient temperature evaluation unit	: -30°C to +70 °C
Ambient temperature sensing tube*	: - 40 °C to +180 °C
Dimensions (H x W x D)	: 160.5 x 250.5 x 134 mm
Protection category of case	: IP 65
VdS-Approval	: G 214076

*: Lower or higher temperature ranges are also possible subject to consultation with the manufacturer

2. Modules and Detectors

Loop I/F module for Special Fire Detectors

XLM 35

With the installation of an XLM 35, special fire detectors like ADWs can be ideally connected via the addressable loop to the SecuriFire fire alarm systems.

The normative alarm transmission to the superordinate FACP is then accomplished via the XLM 35.

The module comes with mounting brackets, screws and ribbon cable.

The XLM 35 module allows also central configuration of special fire detectors with the Config Over Line function

Technical data

Operating Voltage from AMB 35	: 5 V DC
Maximum power consumption	: 20 mA
Dimensions (H x W x D)	: 95 x 58 x 17 mm

Relay I/F module for Special Fire Detectors

RIM 36

The RIM 36 brings five (5) additional relay outputs to your Special Fire Detector.

Expansion limit is two (2) RIM 35 / 10 relays.

Each relay can be assigned to any ADW event by programming with the ADW Config software.

The module comes with mounting brackets, screws and ribbon cable.

Technical data

Max. relay output load	: 50 / 1 / 30 V DC/A/W
Dimensions (H x W x D)	: 95 x 58 x 17mm

2. Modules and Detectors

Serial I/F Module networking of Special Fire Detectors

SIM 35

For the RS 485 networking of up to 250 Special Fire Detectors like ADW 535.

Using the “ADW Config” configuration software, all ADWs in the network can be visualised and configured from a PC.

The module comes with mounting brackets, screws and ribbon cables.

Technical data

Dimensions (H x W x D)	: 95 x 58 x 17 mm

Serial Master Module for networking of Special Fire Detectors

SMM 535

This interface connects the RS485 (over SIM 35) networked ADWs to a USB port of a PC.

It is powered by the USB port.

Technical data

Power Supply	: USB powered / 5 VDC
Operating temperature	: -30°C to +60°
Dimensions (H x W x D)	: 82 x 89 x 55 mm

3. Accessories

3.1 Copper parts

Standard sensing tube for applications with normal ambient temperatures.
–40 – +180°C (When used at 100°C and above, use metal pipe clamps).

Sensing tube copper 5/4mm

TU 5/4 Cu

Tube to create the sensor part (straight piece 5.5m)

Technical data

Diameter outside	: 5 mm
Diameter inside	: 4 mm
Length	: 5.5 m
Material	: copper

Sensing tube copper 5/4mm

TU 5/4 Cu 50

Tube to create the sensor part, 1 pcs. (coil 50m)

Technical data

Diameter outside	: 5 mm
Diameter inside	: 4 mm
Length	: 50 m
Material	: copper

Sensing-Coil of TU 5/4 Cu

SC 5/4 Cu 5

Sensing coil of TU 5/4 Cu

Technical data

Length	: 5 m
Material	: copper

Screw Junction straight for TU 5/4 Cu

SJ 5/4 CuZn

Screw junction straight for TU 5/4 Cu

Technical data

Length	: 5 mm
Material	: brass
Packaging Unit	: 10 pieces

T-Junction for TU 5/4 Cu

TJ 5/4 CuZn

T-Junction for TU 5/4 Cu

Technical data

Packaging Unit	: 10 pieces

3.2. Polyamide Parts and installation materials

Flexible Hose Polyamide 5/3mm

FH 5/3 PA

Flexible Hose to connect the ADW detection unit with the sensor part (Cu, St, PTFE) of the sensing tube.

To be used together with stiffener sleeve SS 3 CuZn or SS 3 St.

Technical data

Diameter outside / inside	: 5 mm / 3 mm
Length	: 1 m
Material	: polyamide

Stiffener sleeve brass for FH 5/3 PA

SS 3 CuZn

Stiffener sleeve for FH 5/3 PA

Technical data

Material	: brass
Packaging Unit	: 10 pieces

Pipe clamp

PC 5/6 PA

To mount the sensing tube. (delivery unit 100 pcs)

Technical data

For pipe diameter	: 5 mm
Temperature range	: -40 - +85°C
Material	: polyamide

Pipe clamp

PC 5/6 CuZn

To mount the sensing tube. Inclusive one stiffener sleeve SS 3CuZn.

Technical data

For pipe diameter	: 5 mm
Material	: brass
Packaging Unit	: 10 pieces

Introduction

SecuriSens LIST heat detectors, where all other detectors reach their limits.

Dust, heat, smoke, exhaust fumes and other interference factors have a significant impact on detecting fires when using conventional fire detectors. However, it is exactly under such difficult conditions that the fire risk is so great and it is vital to ensure quick and reliable detection – such as in tunnels, industrial facilities, power plants and car parks.

With the SecuriSens LIST line-type heat detectors, Securiton provides systems that can enable the rapid localisation of a fire – even when used in harsh, aggressive environments.

Safety in tunnels – the SecuriSens LIST.

The SecuriSens LIST SEC 20 line-type heat detector is the ideal fire detector for use in tunnels. It consists of the SEC 20 sensor cable and the LISTcontroller.

The system offers reliable monitoring of sections of up to 3,200 metres in length, or up to 320 sensors. The sensor cable can be connected to the LISTcontroller (except in redundant operation it is required a second LISTcontroller). The detection and alarm thresholds can be configured for a maximum of 254 different alarm sections. Every ten seconds, the system measures the temperature on the sensors and compares this with the programmed threshold values.

Outstanding flexibility – because every object needs individual protection.

The spacing between sensors can be freely selected, and it is even possible to combine different sensor spacing distances. You can see where the sensors are located according to the markings on the outer sheathing of the sensor cable. Another highlight (and one that is absolutely unique on the market) is the problem-free branching of the cable harnesses. External individual sensors in metal housings are available for special applications and can be easily connected to the SecuriSens LIST system. Different sensor cable areas can be connected together with one signal cable.

Product

The descriptions and technical data included in this catalogue are up-to-date at the time of release. We reserve the right to make alterations to them, particularly where justified by technological advancements. The illustrated products may also differ visually from the products supplied as a result of continuous further development of products.

1. Processor Units

Control and Evaluation Unit

Lcon SEC (Standard)

Lcon LB (with loop function)

Cable terminal unit with a sensor cable connection.

The LIST controller is the central control unit and cable terminal processor for the SEC 20 sensor cable.

With an ARM9™ embedded processor and two peripheral processors it provides the evaluation and signaling. Detection and alarm threshold values can be differently programmed for up to 254 alarm sections.

Used in pairs and enhanced with RDT function, LIST controllers LB guarantee full cable and device redundancy.

Scope of delivery:
1x connecting cableVK24-S4-KL-03
1x connecting cableVKI/O-S4-KL-03
1x connecting cableVKSEC-S4-KL-03

Technical data

Contact Voltage	: 48 V DC / 32 V AC max
Supply Voltage	: 9,5 … 36 V DC
Contact current	: 250 mA max. (resistive load)
Input	: 1 x external reset (5 V … 36 V DC)
Ambient temperature	: -5 °C … +70 °C,
Current draw at 24 V DC	: Normal 175 mA, Alarm 212 mA
Power consumption	: Max. 5 W
Relay outputs	: 1 Relay for fault (= active without power) 1 Relay each for alarm, pre-alarm and frost-alarm
Dimensions (H x W x D)	: 482.6 x 43.6 x 313.5 mm
Evaluation	: Heat
VdS-Approval	: G 213072

SecuriSens LIST

Relay Module

RELMOD

Relay module with 16 relays and 8 inputs.
- Very low energy consumption
- Coding Switch for module address (1 … 16)
- Inputs to remotely activate revision-mode and to initiate alarm simulations
- Inputs for external alarm- and fault-handling signals
- Input to trigger timer-controlled deactivation of differential temperature monitoring

Technical data

Contact Voltage	: 48 V DC / 32 V AC
Supply Voltage	: 250 mA max. (resistive load)
Contact current	: 10 … 36 V DC
Current draw at 24 V DC	: 56 mA (Normal), 105 mA (Alarm)
Power consumption	: Max. 2,4 W
Relay outputs	: 16 x toggle contacts for alarm, pre-alarm, fault and frost-alarm (loop resistors may be inserted for closed-circuit monitoring
Optocoupler input	: 8x electrically isolated, 5 … 28 V DC signals
Ambient temperature	: 0 °C … +70 °C
Dimensions (H x W x D)	: 167 x 113.3 x 66.2 mm

Remote Display Unit

RDU 316

Alphanumerical remote display, coloured background, 3 lines, 16 characters each, with menu-keys and common LEDs; RS 485 interface to communicate with a maximum of 31 SCU 800 control units; allow the identification of a sensor number in case of alarm

- stores all messages incl. date & time
- indicates messages with unit and sensor number, alarm zone
- test mode, which gives the status of the sensors
- clear text display in various language

Technical data

Current consumption 24V	: 40 mA (Normal), 100 mA (Alarm)
Power supply	: 10.... 36 V DC
Protection class	: IP 66
Ambient temperature	: 0 °C … +60 °C
Dimensions (H x W x D)	: 110 x 140 x 60 mm

2. Sensing Cable and Accessories

Cable List

SEC 20/02 (Sensor spacing 2m)
SEC 20/04 (Sensor spacing 4m)
SEC 20/05 (Sensor spacing 5m)
SEC 20/08 (Sensor spacing 8m)
SEC 20/10 (Sensor spacing 10m)

„ Can be used in a temperature range of -40°C to +85°C (briefly +200°C) and detects temperatures with a resolution of 0.1°C. Cable terminal processor and sensors communicate bi-directionally.

The cable sheathing is marked with the sensor designations.

Cable design:
- Ribbon cable conductor, 4-core with mounted hybrid switches
- Filling material with strain relief (for cable protection in the event of a fire)
- Integrated aluminium shield
- Outer sheath halogen-free and flame resistant

Technical data

Operating temperature	: -40 °C … +85 °C up to +200 °C short term
Measuring temperature	: -40 °C … +200 °C
Cable diameter	: Typ. 18 mm
Flat conductor resistance	: Typ. 85 Ω / km (single conductor)
Sheath material	: HM4 mixture, halogen free, flame retardan
Weight	: Typ. 0.45 kg / m
VdS-Approval	: G 213072

Connection Cable

CC 20

LISTEC supply cable 2x2x0.8, shielded, JE-H(ST)H E30, for an SEC 20 sensor cable.

If it is not possible to connect the sensor cable directly to the sensor control unit, the connection cable CC 20 can connect sensor control unit and sensor cable via the connection box.

Technical data

Operating temperature	: -30 °C … +70 °C
Sheath material	: HM2 compound, flame retardant

Connection Box

CBO 20/0 (for two SEC20)
CBO 20/1 (to link a SEC20 with a CC 20)
CBO 20/3 (to link up to three SEC with up to two CC20)

Box for the connection of sensor cable SEC 20, incl. connection module CCM with over-voltage-protection.

Flat cable connector and shield connectors are included.

Technical data

Protection class	: IP66
Operating temperature	: -30°C ....+90°C
Dimensions (H x W x D)	: 244 x 164 x 101 mm

Introduction

SecuriSens d-LIST heat detectors, where all other detectors reach their limits.

Dust, heat, smoke, exhaust fumes and other interference factors have a significant impact on detecting fires when using conventional fire detectors. However, it is exactly under such difficult conditions that the fire risk is so great and it is vital to ensure quick and reliable detection – such as in tunnels, industrial facilities, power plants and car parks.

With the SecuriSens d-LIST line-type heat detectors, Securiton provides systems that can enable the rapid localisation of a fire – even when used in harsh, aggressive environments.

Safety in industrial facilities – the SecuriSens d-LIST.

The SecuriSens d-LIST line-type heat detector with SEC 15 sensor cable is ideally suited to applications with small monitoring areas.

Two sensor cables with a maximum length of 250 metres each can be connected to the SCU 800 (sensor control unit) and put into operation at the touch of a button – and all without special aids or advance knowledge of the system. The monitoring system with a maximum of two sets of 99 sensors can be universally integrated in fire alarm systems and also offers mobile application possibilities. Several SCU 800 units can be networked easily for monitoring larger areas. The d-LIST system can also be expanded with individual temperature sensors in metal housings for monitoring critical areas such as drive units on conveyor belts and escalators, among others.

Outstanding flexibility – because every object needs individual protection.

The spacing between sensors can be freely selected, and it is even possible to combine different sensor spacing distances. You can see where the sensors are located according to the markings on the outer sheathing of the sensor cable. Another highlight (and one that is absolutely unique on the market) is the problem-free branching of the cable harnesses. External individual sensors in metal housings are available for special applications and can be easily connected to the SecuriSens d-LIST system. Different sensor cable areas can be connected together with one signal cable.

Product

The descriptions and technical data included in this catalogue are up-to-date at the time of release. We reserve the right to make alterations to them, particularly where justified by technological advancements. The illustrated products may also differ visually from the products supplied as a result of continuous further development of products.

1. Processor Units

Sensor Control Unit

SCU 800-03

SCU 800/16

The sensor control unit SCU 800 is the central supervisory element for the d-LIST system.

It provides up to two d-LIST sensor cables with power, performs the cyclic addressing of the connected sensors every 10 seconds, acquires the temperature values measured by each sensor and evaluates the data with reference to various criteria.

A fire alarm is generated if either a given maximum threshold is exceeded, or if an increase in temperature takes place within a certain time (differential evaluation).

The two threshols (set-points) can be set individually for each of the attached sensor cables.

The measurement resolution of 0,1° gives the system a high sensitivity. The tried and tested algorithms used in the evaluation eliminate false alarms due to natural temperature variations.

Technical data

Switching voltage	: 48 VDC / 32 VAC max.
Switching current	: 250 mA max.
Input	: 5 VDC reset input, galvanically isolated
Continuous operating temperature	: -25°C .. +70°C
Power supply	: 21 – 29 VDC
Power consumption	: 1 – 29 VDC
Outputs	: **SCU800-03:** 3 relays (1 alarm relay per cable, 1 fault relay) **SCU800/16:** 16 zonal relays
Dimensions (W x H x D)	: 260 x 150 x 90 mm
DNV GL Approval	: 60 380 - 09 HH
VdS Approval	: G 205143

LISTcontroller Master

Lcon Master

Central control and display unit as master for d-LIST sensor cable systems, with alphanumeric LCD display and operation buttons, a potential-free change-over contact for buzzer fault/alarm each, operating voltage: 24 VDC; mounted in 19“ unit rack, for cabinet mounting:

Technical data

Operating voltage	: 24 VDC
Operating temperature	: -5 °C ... +70 °C
Power supply	: 9,5 V … 36 V DC
Current draw at 24 V DC	: 175 mA (Normal), 212 mA (Alarm)
Power consumption	: Max. 5 W
Relay output	: 1 Relay each for alarm pre-alarm and frost-alarm 1 Relay for fault (= active without power)
Switching Voltage	: 48 V DC / 32 V AC max.
Switching current	: 250 mA max. (resistive load)
Input	: 1 x external reset (5 V … 36 V DC)
Resembling a 19”	: 1U case and 400 mm depth
Dimensions (W x H x D)	: 482.6 x 43.6 x 315.5 mm
VdS Approval	: G 205143

2. Sensing Cable d-LIST

Cable d-List

SEC 15/01 (Sensor spacing 1m)
SEC 15/02 (Sensor spacing 2m)
SEC 15/03 (Sensor spacing 3m)
SEC 15/04 (Sensor spacing 4m)
SEC 15/05 (Sensor spacing 5m)

The cable is able to measure temperatures from -40°C to +85°C (for short periods +120°C) with a resolution of 0,1° Celsius.

Cable structure:
- Hybrid circuits mounted on a 2 core flat flexible cable
- Filling material with strain relief, which secures the cable in case of fire
- Aluminium shield
- Halogenfree cable sheath; flame retardent and non-corrosive, with sensor marking

Technical data

Operating temperature	: -40 °C … +85 °C up to +120 °C short term
Measuring temperature	: -40 °C … +120 °C
Cable diameter	: Typ. 15 mm
Flat conductor resistance	: Typ. 71 Ω / km (single conductor)
Sheath material	: HM4 mixture, halogen free, flame retardant
Weight	: Typ. 0,35 kg / m
DNV GL Approval	: 60 380 - 09 HH
VdS Approval	: G 205143

3. External Sensor d-LIST

External Sensor rectangular

ESD-A5-EL-01	1m
ESD-A5-EL-05	5m
ESD-A5-EL-10	10m

Stainless steel sensor A5 for use with the d-LIST-System, whereby all sensors are connected in parallel via standard terminals.

These sensors can be used together with SEC15 sensor cable and the control unit SCU800.

Technical data

Design	: rectangular 8 mm
Measuring range	: -40°C...+150°C
Sensor material	: Stainless steel

External Sensor round

ESD-A5-RL-01	1m
ESD-A5-RL-05	5m
ESD-A5-RL-10	10m

Stainless steel sensor A5 for use with the d-LIST-System, whereby all sensors are connected in parallel via standard terminals.

These sensors can be used together with SEC15 sensor cable and the control unit SCU800.

Technical data

Design	: round 8 mm
Measuring range	: -40°C...+150°C
Sensor material	: Stainless steel

4. Accessories d-LIST

Connection Box

CBO 5-SEC

Connection unit for one or two temperature sensor cable SEC15 including an universal connection module UCM.

If it is not possible to connect the sensor cable directly to the sensor control unit SCU800, the connection cable CC15 can connect sensor control unit and sensor cable via the connection box.

In the box the connection cable and the sensor cable are linked together via the connection module UCM.

If short transmission lines are linked the universal connection module has the possibility to activate adaptation resistors.

Technical data

Operating temperature	: -35°C ... +60°C (short period +80°C)
Resistance to impact	: IK 08 according DIN 5012 / VDE 0470 part 100
Protection class	: IP 66
Dimensions (W x H x D)	: 130 x 130 x 75 mm

Connection Cable

CC 15

LISTEC supply cable 1x2x0.8, shielded, JE-H(ST)H E30, for an SEC 15 sensor cable.

If it is not possible to connect the sensor cable directly to the sensor control unit SCU800, the connection cable CC15 can connect sensor control unit and sensor cable via the connection box.

Technical data

Operating temperature	: -30 °C … +70 °C
Sheath material	: HM2 compound, flame retardant

Introduction

Beam smoke detector based on the reflection principle

Beam Smoke Detector

The beam smoke detector systems consist of a transmitter / receiver unit or reflector which is mounted on the opposite wall.

The infrared light beam from the transmitter is sent back to the reflector.

Applications

Thanks to the linear design of transmitter and receiver or reflector, the SecuriBeam can be deployed wherever conventional point detectors cannot be used due to structural issues or when such detectors are not able to guarantee optimal protection

Examples of such applications:

- Large warehouses and production halls
- Covered inner courtyards (atriums)
- Reception halls
- Warehouses
- Attics in churches
- Cinemas, theatres

Production

All Securiton fire alarm systems, system components and detectors are developed and manufactured in Europe and in compliance with the most recent European standards, as well as representing the cutting edge of technology based upon the most up-to-date scientific knowledge.

Product

The descriptions and technical data included in this catalogue are up-to-date at the time of release. We reserve the right to make alterations to them, particularly where justified by technological advancements. The illustrated products may also differ visually from the products supplied as a result of continuous further development of products.

1. Beam Detector BSD and Accessories

Beam Smoke Detector incl. 1 BRE 535

BSD 535

The Beam Detector BSD 535 including one reflector BRE 535 is particularly suited for indoor smoke detection in industrial sheds - palletised and traditional warehouses, garages, supermarkets, mega stores, cinemas, theatres, conference rooms, trade exhibition centres, public buildings with large flows of people in general and any other large civil and industrial spaces of any shape.

Technical data

Operating voltage	: 12 V DC – 30 V DC
Ambient temperature detection unit	: -10 °C to +55 °C
Operating Distance	: 3 - 100 m
Detector protection	: IP 31
Optical block protection	: IP 51
Evaluation	: Smoke
VdS Approval	: G 210082

Beam Detector Reset Unit

BRU 535

The BRU-535 is a reset unit, with which the BDS 535 can be local deactivated.

The BRU 535 can be connected to the BRC 535

Technical data

Dimensions (H x W x D)	: 90.5x90.5x40.5 mm
Index of Protection	: IP 40

Beam detector Remote Control

BRC 535

The BRC 535 is an aid tool for the installation, start up and maintenance of the Securiton linear smoke detector, version BSD 535 and up.

Technical data

Dimensions (H x W x D)	: 173x110x33 mm

VdS CE 0333

2. Beam Detector ILIA

2.1 SecuriBeam ILIA

ILIA with smoke/fire detection

ILIA S/E

The transmitter / receiver system ILIA S/E is particularly suited for indoor smoke and fire detection.

Thanks to the linear design with transmitter and receiver, it may be used wherever structural situations prevent the installation of conventional point detectors or where the latter can no longer guarantee optimal protection.

Technical data

Operating voltage	: 9.6 V DC - 32 V DC
Ambient temperature detection unit	: -20 °C to +65 °C
Operating Distance	: 10 - 200 m
Detector protection	: IP 65
Evaluation	: Smoke / Fire
VdS Approval	: G 209195

2.2. SecuriBeam ILIA Dust Pro

ILIA DUST Detector for polluted areas

ILIA S/E DUSTP

The transmitter / receiver system ILIA S/E Dust Pro is particularly suited for indoor smoke and fire detection in extremely dusty environments.

Thanks to the linear design with transmitter and receiver, it may be used wherever structural situations prevent the installation of conventional point detectors or where the latter can no longer guarantee optimal protection..

Technical data

Operating voltage	: 9.6 V DC - 32 V DC
Ambient temperature detection unit	: -20 °C to +65 °C
Operating Distance	: 10 - 200 m
Detector protection	: IP 65
Evaluation	: Smoke / Fire
VdS Approval	: G 209195

VdS CE 0333

2.3. Accessories for ILIA

Controll and I/F Unit for 2 systems

ILIA KE/2

Control unit for 2 x ILIA S/E for stub connection.

All adjustment, testing and maintenance work can be simply and reliably performed on the easily accessible control unit.

Technical data

Dimensions (H x W x D)	: 145x177x68 mm
Weight	: 375g

Controll and I/F Unit for 2 DUST systems

ILIA KE/2 DUSTP

Control unit for 2 x ILIA DUSTP S/E for stub connection, in extremely dusty environments.

All adjustment, testing and maintenance work can be simply and reliably performed on the easily accessible control unit. The control unit ILIA KE/2 DUSTP is design for extremely dusty environments

Technical data

Dimensions (H x W x D)	: 145x177x68 mm
Weight	: 375g

Protective Housing

ILIA SGH

Protective case for extremely dusty environments.

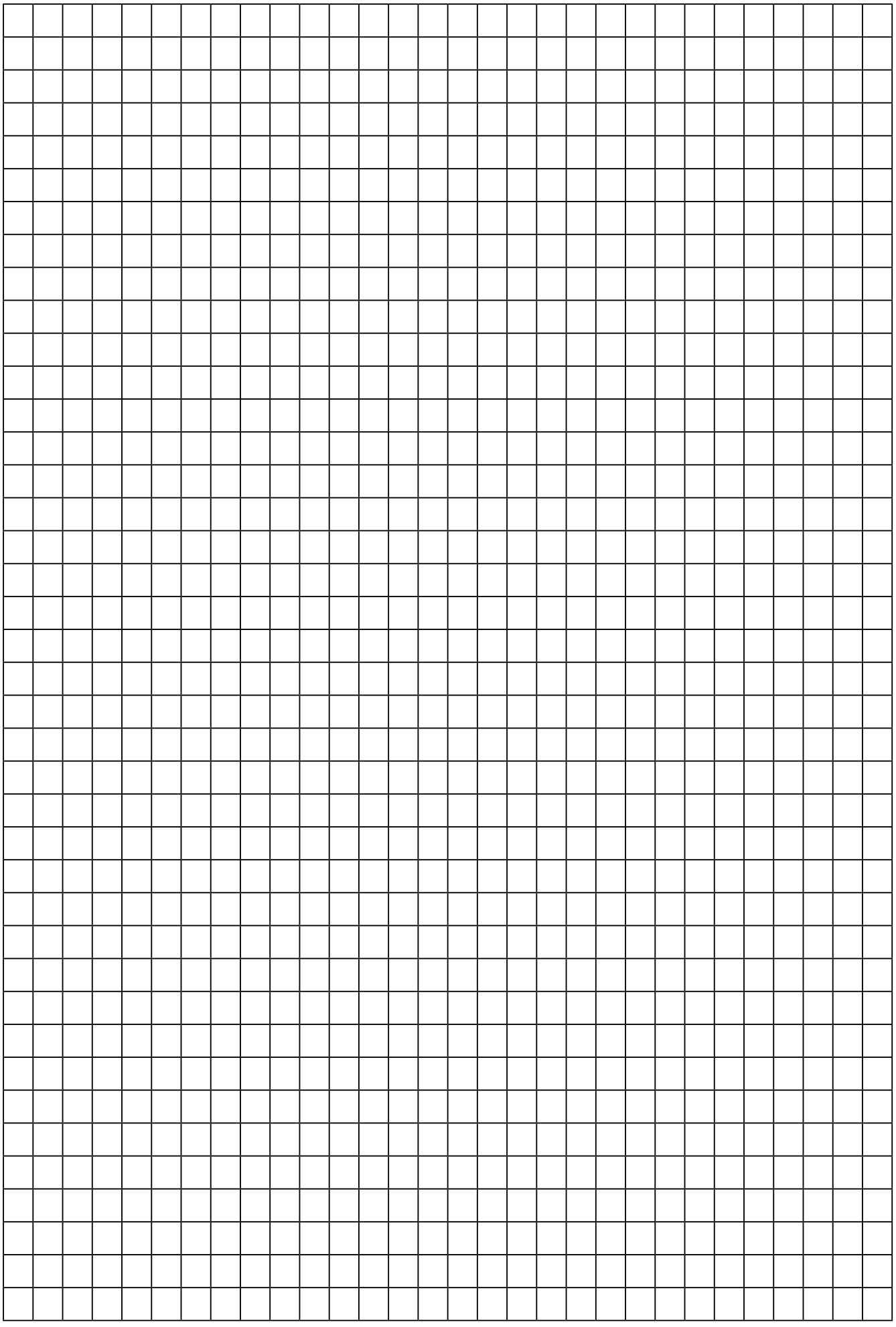
- Additional security for permanent acid concentrations in the air or aggressive dust concentrations

- Protection against misalignment during cleaning and Disinfection

Technical data

Protection Class	: IP 65
Dimensions (H x W x D)	: 303x303x260 mm

VdS CE 0333



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