

Smart Dupline® Smoke Detector Type BSG-SMOx-U

CARLO GAVAZZI



- Smoke detector using Tyndall effect
- Detection of smouldering fires and flaming fires with smoke development
- Without radioactive sources
- Detection of areas up to 60 m²
- Transmission of alarms and Alive signals via Dupline®
- Operating voltage supplied by Dupline® bus
- Optional use of the smoke detector as alarm device for other detections such as gas, water and burglary via Dupline®
- Battery backup if the Dupline® connection is interrupted
- Acoustic alarm > 85 dB
- Constant monitoring of sensor sensitivity via Dupline®
- For ceiling mounting

Product Description

BSG-SMOx-U is a detector for home/building applications which transmits the alarm event to the smart-house controller. It is part of the smart-house concept and it can be used in all the functions where alarm signals are needed.

Ordering Key

BSGSMOAU

Decentral _____
 Smoke Detector _____
 No battery back-up _____
 Smart Dupline® _____

Type Selection

Battery back-up	Supply by Dupline®
YES	BSG-SMO-U
NO	BSG-SMOA-U

Input Specifications

Detector	Optical (Tyndall effect)
----------	--------------------------

Dupline® Output Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current When the alarm is active	10 mA

Supply Specifications

Power supply	Supplied by Dupline®
Current consumption typ.	2.5 mA
Battery current consumption	20 µA, BSG-SMO-U only
Supply voltage	9 VDC, BSG-SMO-U only



General Specifications

Address assignments / channel programming	<p>If it is used with the SH2WEB24 the address assignment is automatic: the controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SH tool.</p> <p>If it is used with the BH8-CTRLX-230, the channels have to be programmed by the BGP-COD-BAT</p>	Indication	<p>Red LED. Short flash once every 42 sec. (alive signal): the smoke detector is OK. Short flash every 0.5 sec.: Alarm. Red flash (42 sec.) and asynchronous beep = Dirty Red flash (42 sec.) and simultaneous beep = Low battery voltage.</p>
Channel assignment	<p>I/O number 1 Alarm signal. The status of the signal can be programmed (see below).</p> <p>I/O number 2 Monitoring of sensor (tamper/presence). The signal is always active if OK, otherwise inactive.</p> <p>I/O number 3 Monitoring of battery voltage. The signal is active if the voltage is low.</p> <p>I/O number 4 Monitoring of sensor sensitivity. The signal is active if the sensor becomes dirty.</p> <p>I/O number 5 Forced alarm. The smoke sensor can be used as an alarm device for e.g. water, gas and burglar alarms.</p>	Environment	<p>Degree of protection IP 43 Operating temperature -0° to +50°C Storage temperature -5° to +85°C</p>
Fail-Safe mode	<p>BSG-SMO-U If the Dupline® connection is interrupted, the smoke sensor will still work, but as a normal individual smoke detector.</p> <p>BSG-SMOA-U If the Dupline® connection is interrupted, the smoke sensor will also be interrupted.</p>	Connection	<p>Screwless detachable 0.2 to 1.5 mm² D+ Signal D- GND</p>
Channel assignment		Housing	<p>For installation on ceilings Dimensions Ø 100 x 51 mm Material ABS Colour White</p>
Channel assignment		Weight	160 g
Channel assignment		Sound level	> 85 dB(A) / 3 m (10 ft)
Channel assignment		Battery	IEC 6LR 61
Channel assignment		Average life, battery	2 years
Channel assignment		Alarm signalling	Acoustic and optical
Channel assignment		CE Marking	Yes
Fail-Safe mode		EMC	<p>Immunity</p> <ul style="list-style-type: none"> - Electrostatic discharge EN 61000-6-2 - Radiated radiofrequency EN 61000-4-2 - Burst immunity EN 61000-4-3 - Surge EN 61000-4-4 - Conducted radio frequency EN 61000-4-5 - Power frequency magnetic fields EN 61000-4-6 - Voltage dips, variations, interruptions EN 61000-4-8 - Emission EN 61000-4-11 <p>Emission</p> <ul style="list-style-type: none"> - Conducted and radiated emissions EN 61000-6-3 - Conducted emissions CISPR 22 (EN55022), cl. B - Radiated emissions CISPR 16-2-1 (EN55016-2-1) - Radiated emissions CISPR 16-2-3 (EN55016-2-3)

Mode of Operation

BSG-SMOx-U connected to the SH2WEB24

Coding/Addressing

If the device module is connected to the SH2WEB24 controller, no addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN in

the SH tool when creating the system configuration.
Used channels: 4 input channels, 1 output channel.

BSG-SMOx-U connected to BH8-CTRLX-230

Coding/Addressing

If the input module is connected to the BH8-CTRLX-

230 controller, the user has to program the channels using the BGP-COD-BAT: this module has:
- 4 input channels (I/O 1-4)
- 1 output channel (I/O 5)

The alarm signal can be programmed to be active

when the alarm is ON or when the alarm is OFF.

Fail/safe bit = 0
Signal active when the alarm is ON.

Fail/safe bit = 1
Signal active when the alarm is not active.