AUTROLON booster - BSL-325

AutroSafe interactive fire detection system
Product datasheet

Features

■ Boosts the data signals on the AutroSafe local operating network; AUTROLON
■ Ensures reliable communication where larger distances between panels on the AUTROLON are necessary
■ Easily plugged onto other I/O modules on a standard mounting rail inside the Fire alarm control panel/controller
■ Powered from I/O module stack or screw terminals
■ Designed to meet EN 54 requirements and conforms to CE standards

Applications

The AUTROLON booster BSL-325 is used to boost the data signals on the AutroSafe local operating network; AUTROLON.

The booster ensures reliable communication in cases where larger distances between panels are necessary. By using AUTROLON boosters the total cable length can be greatly increased (see requirements and limitations below).

If the module is mounted on the standard mounting rail inside the Fire alarm control panel/controller it is powered with 24 VDC from the I/O module stack. If it is not mounted on the standard mounting rail, external 24 VDC Power must be supplied to the screw terminals.

The booster can also be used in cases when different cable types* (AUTROLON cables) are used in a distributed system.

*NOTE: The use of different cable types is not recommended. If, however, a mix of different cable types is required, the cable types can be "isolated" from each other by the use of the AUTROLON booster. In this way each cable can be terminated properly and the signal will be amplified before it is transferred from one cable to the other.
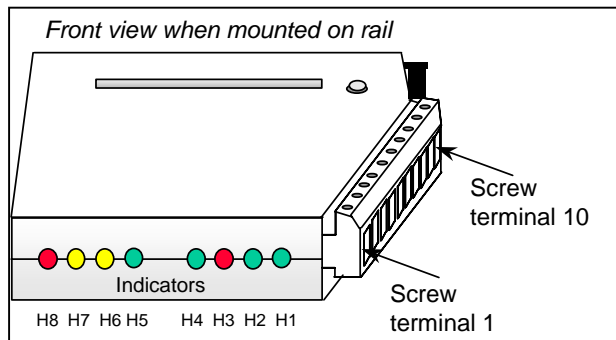
Requirements

In cases when it is necessary to boost the data signals on the AUTROLON, a minimum of 2 Boosters must be used in one AUTROLON ring to maintain AUTROLON loop redundancy. Boosters are required if the AUTROLON cable is more than 1km in length. Boosters must be evenly spread round the AUTROLON ring.

Limitations

■ Maximum 1000 metres between any two boosters
■ Maximum 8 panels between any two boosters
■ Maximum 6 boosters per AUTROLON ring
■ Maximum 32 panels per AUTROLON ring
■ Maximum length 2,8 km (the total AUTROLON ring with boosters)

Connections/indicators

Front view when mounted on rail

Indicators

H8 H7 H6 H5   H4 H3 H2 H1

Screw terminal 10

Screw terminal 1

■ H1 green LED, LON A transmitter active
■ H2 green LED, LON B transmitter active
■ H3 red LED, not used
■ H4 green LED, module OK when blinking
■ H5 green LED, > 0,01 % network load
■ H6 green LED, > 1 % network load
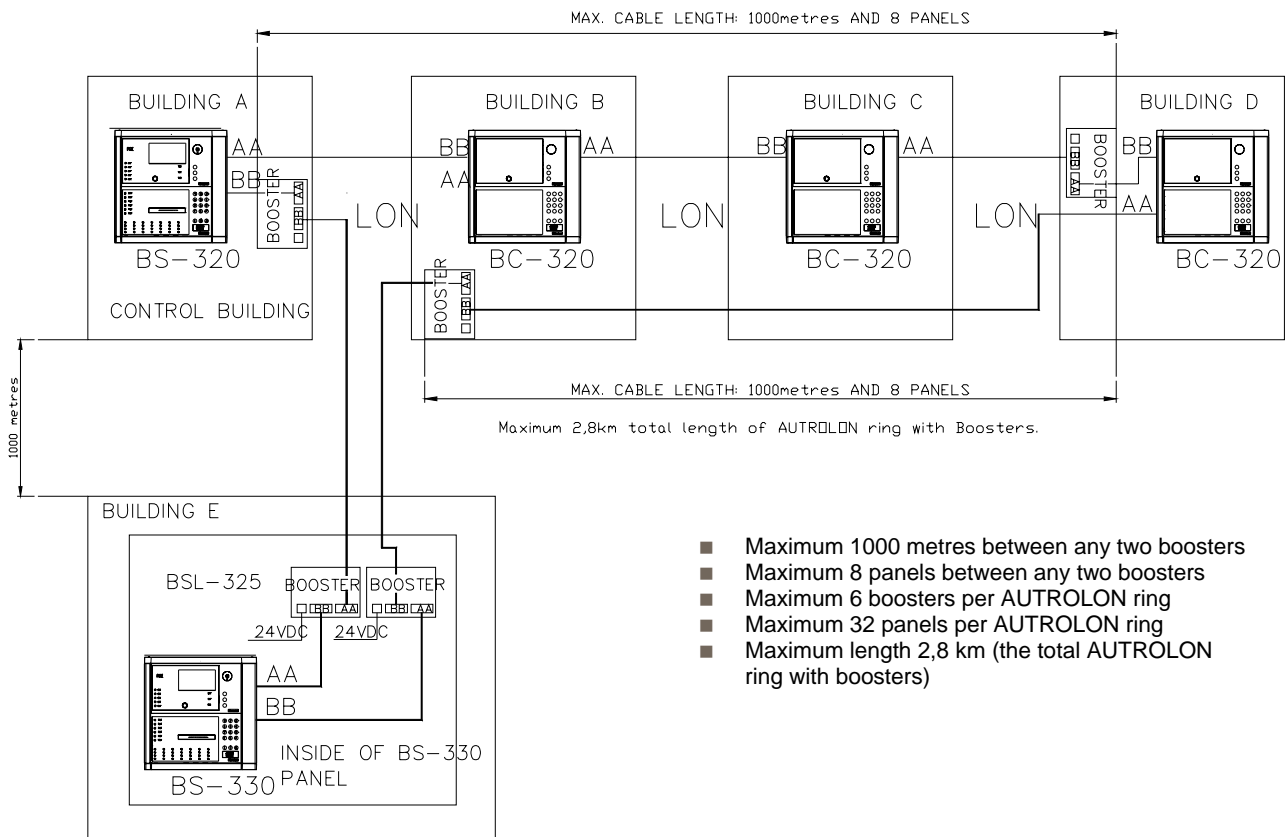■ H7 green LED, > 10 % network load
■ H8 green LED, > 50 % network load

BSL-325 has the following connections:

Screw terminal no.	Signal
1	LON A (polarity independent)
2	LON A (polarity independent)
3	Shield LON A
4	LON B (polarity independent)
5	LON B (polarity independent)
6	Shield LON B
7	Do NOT connect
8	Do NOT connect
9	+24 VDC supply
10	0 VDC supply

Technical specifications

Dimensions (mm) HxDxW	89x105x32
Weight (g)	81
Materials	Top and bottom: Zytel FR7200 Snap on mounting device: Zytel 7335S
Mounting	Onto a standard 35mm mounting rail inside the Fire alarm control panel, Controller or separate box.
Electrical connection	Internal system: plug in connection Screw terminals (maximum cable dimension 2,5mm^2)
Supply voltage	21 - 29 VDC
Internal current consumption	Maximum 100 mA, typically 30 mA
Degree of protection	IP20
Humidity	93% relative humidity at 40°C
Working temperature	-20 to +60°C
Cable specification	Twisted pair, 100Ω characteristic impendance

Part number	Description
116-BSL-325	AUTROLON booster

Block diagram – typical example

- Maximum 1000 metres between any two boosters
- Maximum 8 panels between any two boosters
- Maximum 6 boosters per AUTROLON ring
- Maximum 32 panels per AUTROLON ring
- Maximum length 2,8 km (the total AUTROLON ring with boosters)