BOSCH

ISP-EM55SM-120 LSN Exp. module, EM55, surface mount

This expansion module integrates conventional sensor technology, for example conventional magnet contacts, into the local security network (LSN). Surface mounted.

Functions

LSN connection

The zone expander module supports LSN classic mode and LSN improved mode.

The LSN connection is 2-wire. Tamper, hold-up, bolt or intrusion messages and alarms are transmitted and analyzed. The power for the device is supplied via the two wires.

A second pair of LSN wires can be looped through to provide a separate power source for any subsequent LSN element.

In case of wire interruptions or short-circuits, all LSN elements continue to be monitored. The system automatically creates two stub lines that continue to monitor from both sides up to the location of the fault.

The LSN element has a lid tamper contact, and can be extended with optional wall tamper contact(s) for VdS-C and EN-Grade-3 compliance. If any tamper contact is triggered, it sends a signal that is transmitted and evaluated as a unique message.

Regulatory information

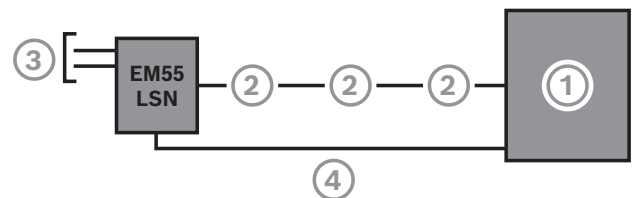| Region	Regulatory compliance/quality marks	
Europe	CE	[ISP-EM55SM-120, ISP-EM55FM-120]

LSN

- ▶ 2 primary lines for connecting contact detectors, magnetic contacts or bolt contacts
- ▶ The point type can be programmed in the control panel
- ▶ Onboard internal EOL 12.1 kΩ resistors
- ▶ The circuit board is equipped with a tamper contact
- ▶ Wall tamper

Region	Regulatory compliance/quality marks	
Germany	VdS	G112091

Installation/configuration notes

Connecting conventional detectors

Conventional detectors can be connected at the two primary lines. The reports are transmitted from the conventional detector to the LSN coupler in analog mode. This means existing equipment can be extended with ease.

Element	Description
1	Control panel
2	LSN element
3	Primary lines (up to two)
4	LSN loop

Cable length

ⓘ **Notice**
Cable length
Exceeding the permitted cable length is not covered by CE declarations and leads to malfunction of the system.

- Do not exceed the total cable length of 500 m for the primary cables, the control cables, and the contact cables of EM 55.

Permitted cable length of the primary cables (PL)
- Maximum length of one unshielded cable: 3 m
- Maximum length of all shielded cables: 500 m

The specified length relates to interference-free LSN data transmission. In practice, interference factors that can lead to alarm or tampering in the primary line need to be taken into account. Depending on the environmental influences, experience values must be applied when determining length.

Parts included

Quantity	Component
1	Surface box
1	Expansion module
2	Fastening screws for expansion module
1	Lid
1	Lid-fastening screw
1	Self-adhesive seal
2	Installation manual

Technical specifications

Electrical

Operating voltage (VDC)	10 VDC – 33 VDC
Current consumption (mA)	0 mA – 0.60 mA
Number of primary lines	2
Terminal resistance in KΩ	12.1

Mechanical

Dimensions (Ø x D) (mm)	7.6 mm x 3.8 mm
Weight (g)	83 g
Material	Plastic
Color (RAL)	RAL 9002 Gray white

Environmental

Operating temperature (℃)	0 ℃ – 50 ℃
IP rating	IP40
Impact protection	IK04
Environmental class (EN 50130-5)	II
Environmental class (VdS 2110)	II

Ordering information

ISP-EM55SM-120 LSN Exp. module, EM55, surface mount
For monitored connection of conventional detectors (2 primary lines) on the local security network LSN, surface-mounted
Order number **ISP-EM55SM-120 | F.01U.173.752 F.01U.411.660**

Accessories
ISP-EM55-WTC LSN EM55 Wall tamper contact 2 pcs
Wall tamper contact for the EM55 expansion modules, mandatory for installations according to VdS-C or EN Grade 3 compliance.
Order number **ISP-EM55-WTC | F.01U.411.661**