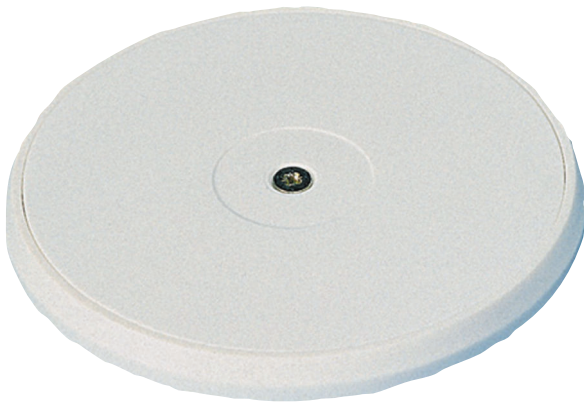


# ISP-EM55FM-120 LSN 2 Zone Expander Module, Recessed Mounting

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- ▶ 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

This zone expander module integrates manual conventional sensor technology (e.g. conventional magnet contacts) into the local security network (LSN).  
Recessed 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 tamper contact. If the tamper contact is triggered, it sends a signal that is transmitted and evaluated as a unique message.

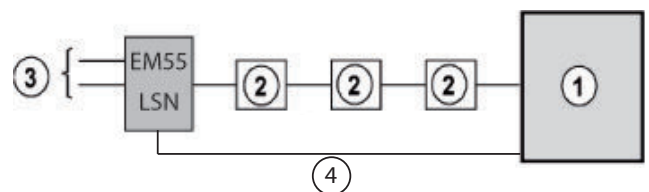
## Certifications and approvals

Region	Certification
Germany	VdS G112091 ISP-EM55FM-120, ISP-EM55SM-120
Europe	CE ISP-EM55SM-120, ISP-EM55FM-120

## 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	1-2 DC primary line
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 **500m** for the primary cables, the control cables and the contact cables of EM 55, KD55/1, NKK, NNK 100 2-wire, NVK and IC 400.

#### Permitted cable length of the primary cables (PL)

- Maximum length of one unshielded cable: 3m
- Maximum length of all shielded cables: 500m

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

Qty.	Component
1	Mount with PCB
2	Fastening screws for mount with PCB
1	Housing cover
1	Housing cover fastening screw
1	Adhesive seal
1	Installation Manual

### Technical specifications

#### Electrical

Minimum operating voltage in VDC	10
Maximum operating voltage in VDC	33
Maximum current consumption in mA	0.6
Number of primary lines	2
Terminal resistance in K $\Omega$	12.1

#### Mechanical

Dimension in cm ( $\emptyset$ x D)	7.6 x 2.5
Housing material	ABS

Color	RAL 9002
Weight in g	54 g

#### Environmental

Minimum operating temperature in °C	0
Maximum operating temperature in °C	50
Protection class	IP40
Security level	IK04
Environmental class	II

### Ordering information

#### ISP-EM55FM-120 LSN 2 Zone Expander Module, Recessed Mounting

For monitored connection of conventional detectors (2 primary lines) on the local security network LSN, recessed-mounted

Order number **ISP-EM55FM-120**

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