



IC 400 LSN universal expander



- ▶ LSN connections correspond to the LSN specifications
- ▶ Output for walk test and alarm memory (programmable)
- ▶ 2 zones
- ▶ 2 Control outputs
- ▶ Tamper contact (sabotage alert)
- ▶ surface installation

The IC 400 LSN universal expander connects conventional motion detectors to the Local SecurityNetwork (LSN).

Functions

Differential detector zones for alarm relay and tamper.
 - Fault input for cover-over report
 The following detector connections to the IC 400 LSN are available:

Interface inputs

1 freely configurable alarm input
 1 tamper input
 ETO malfunction, input for the electronic malfunction detector output (ETO = Electronic Trouble Output) for some detectors, permanently occupied

Interface outputs

Power supply
 Walk test and alarm memory (programmable via the control unit software)

LSN

Should wire interruptions or short-circuits occur, all LSN elements in the LSN loop continue to be monitored. In this event, the system automatically creates two stub

lines which continue to monitor from both sides up to the location of the fault.
 The interface housing has a cover tamper contact, which if triggered, sends a unique message and is evaluated as a sabotage alert. An integrated buzzer can be used to signal status changes (e. g. for tests).

Certifications and Approvals

Country	Certification	IC 400 LSN
DE	VdS	G 101162, C

Installation/Configuration Notes

Interface power supply

The LSN part of all LSN elements (interfaces and detectors) is supplied with power via the control unit's 2-wire LSN line.
 All LSN interface modules are designed to loop through the power supply (+V,-V) of subsequent interfaces.
 The maximum cable length of the separate power supply (+V,-V) depends on the current consumption of the interfaces to be supplied and their peripherals if not powered from an external source.

The applicable voltage range must be taken into account to ensure the correct operation of the LSN interface modules.

Cable lengths

Cable length per zone or control lines

- Maximum length unshielded cable - 10 m
- Maximum length shielded cable - 500 m

Alarm input

The alarm input is equipped with a window comparator. No alarm is generated when this input is terminated with a resistor of between 8.4 kOhm and 14.2 kOhm (typ. 12 kOhm). In all other cases, an alarm is generated. $I_{max} = 0.5 \text{ mA}$.

Tamper input

The tamper input is equipped with a window comparator. No sabotage alert is generated when this input is terminated with a resistor of between 8.4 kOhm and 14.2 kOhm (typ. 12 kOhm). In all other cases, a sabotage alert is generated. $I_{max} = 0.5 \text{ mA}$.

ETOin

Input for the electronic trouble detector output (ETO = Electronic Trouble Output) for some detectors.

Malfunction

Low : $0.0 - 0.8 \text{ V} =$, $I_{max} = 0.12 \text{ mA}$

No malfunction

High: $2.5 - 5.5 \text{ V} =$, $I_{max} = 0.12 \text{ mA}$

The unswitched input is terminated by an internal pull-up resistor.

Outputs

Control outputs

Low:	0 to 0.5 V	$I_{max} = 0.1 \text{ mA}$	Active
------	------------	----------------------------	--------

High:	7 to 9 V	$I_{max} = 0.1 \text{ mA}$	Standby
-------	----------	----------------------------	---------

Note The MAGS-S active glass-break detector, the EKOM 11 contact-less transmitter and the UP 370 T Matchtec detector are not suitable for connection to the IC 400 LSN!

Technical Specifications

Operating voltage

- | | |
|-------------------------|-----------------------|
| • LSN part | + 12 V +33 V |
| • Separate power supply | 10.8 V up to 30V |

Current consumption

- | | |
|----------------------------|------------|
| • LSN part | 3.84 mA |
| • by separate power supply | max. 20 mA |

Inputs/outputs

- | | |
|--------------------------------|---|
| • Inputs | 2 Differential detector zones (1 x alarm, 1 x tamper) |
| • terminal resistance | 12 KOhm |
| • Cover monitoring/malfunction | 1 input active when 0 V |
| • Tamper | Switched internal in series with tamper detector zone |
| • Outputs | Walk test and alarm memory |

Power supply output for connected detectors

- | | |
|-------|------------------------------------|
| • I | 20 mA |
| • + V | $9.6 \text{ V} \pm 0.36 \text{ V}$ |

Housing

- | | |
|------------|-----------------|
| • Material | ABS |
| • Color | White, RAL 9002 |

Ambient temperature	-10°C to +55°C
---------------------	----------------

Dimensions (W x H x D)	85 x 85 x 28 mm
------------------------	-----------------

Protective system	IP 40
-------------------	-------

Environmental class	II
---------------------	----

Ordering Information

IC 400 LSN universal expander

4998110382

Parts Included

Type	Qty.	Components
IC 400 LSN	1	Universal expander

Americas:

Bosch Security Systems
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 585 223 4060
Fax: +1 800 289 0096
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:

Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 40 27 83955
Fax: +31 40 27 86668
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:

Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by