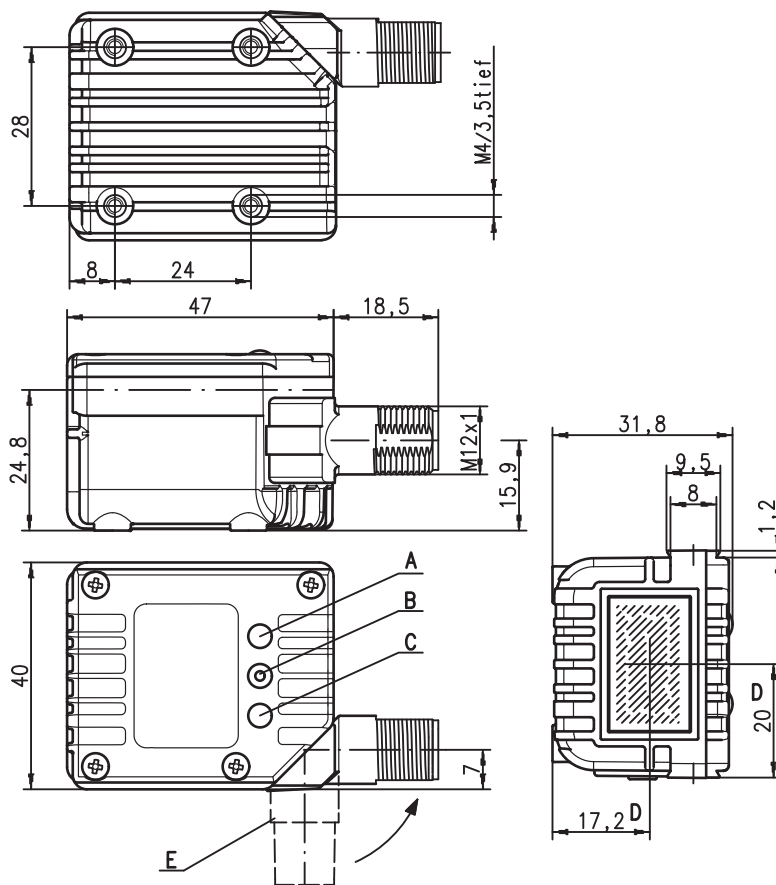en 02-2010/12　50110754

**10 - 30 V**
**DC**

- Very small and compact scanner for 2D codes, bar codes and batch codes
- High resolution
- Trigger via serial command, switching input or trigger button
- Built-in decoder
- LED indicator for completed read operations or switching input
- RS 232 interface
- Operating temperature from 0 through 40°C

CE

cULus LISTED

IP 65

## Accessories

- **Mounting systems (BT 8-O, BT 8-D…, UMS8.2-D…)**

We reserve the right to make changes • DS_LSIS_122_M6M_R1_en.fm

## Dimensioned drawing



**A** Green LED: Power
**B** Trigger button
**C** Green LED: switching output / successful reading
Red LED: switching input / trigger
**D** Optical axis
**E** Turning connector, 90°

## Electrical connection

8-pin M12 connector, A-coded.

| LSIS 122 (RS 232) | 8-pin connector | Signal | RS 232 |
|---|---|---|---|
| | 1 | VIN | 10 … 30VDC |
| | 2 | SWIN | 0 … VIN |
| | 3 | GNDIN | 0V |
| | 4 | SWOUT | 0 … VIN |
| | 5 | nc | |
| | 6 | Data | RXD ± 10V |
| | 7 | Data | TXD ± 10V |
| | 8 | FE | Shield |
| | Thread | FE | Shield |

## Specifications

**Electrical data**

| | |
|---|---|
| Operating voltage $U_B$ | 10 … 30 VDC |
| Power consumption | 1.3 W |
| Current consumption | 130 mA (at 10 VDC) |

**Interfaces**

| | |
|---|---|
| Interface type | RS 232 (±10V) |
| Trigger | serial command, auto-trigger mode or switching input |

**Code types**

| | |
|---|---|
| 2D codes | Data Matrix ECC 200, MaxiCode, PDF417, MicroPDF, QR Code, Aztec, Code 49, EAN/UCC Composite |
| Bar codes | 2/5 Interleaved, Code 39, Code 128, Code 93, Codabar, UPC/EAN, RSS |

**Optical data**

| | |
|---|---|
| Optical system | high-resolution CMOS pixel array 1280x960 |
| Contrast | 45% (black/white) |
| Light source | integrated diffuse LED (red) |
| Read distance | 25 … 310 mm (100% UPC / EAN 13) |
| Focal point | 102 mm |
| Read direction | omnidirectional, various tilt and rotational angles up to 45° |

**Mechanical data**

| | |
|---|---|
| Housing | diecast zinc |
| Weight | 127 g |
| Dimensions | 47x40x32 mm |

**Environmental data**

| | |
|---|---|
| Ambient temp. (operation) | 0°C … +40°C |
| Ambient temp. (storage) | -20°C … +70°C |
| Relative air humidity | 0 … 95% (non-condensing) |
| Protection class | IP 65 |
| Standards conformity | UL 60950-1 |

## Reading field
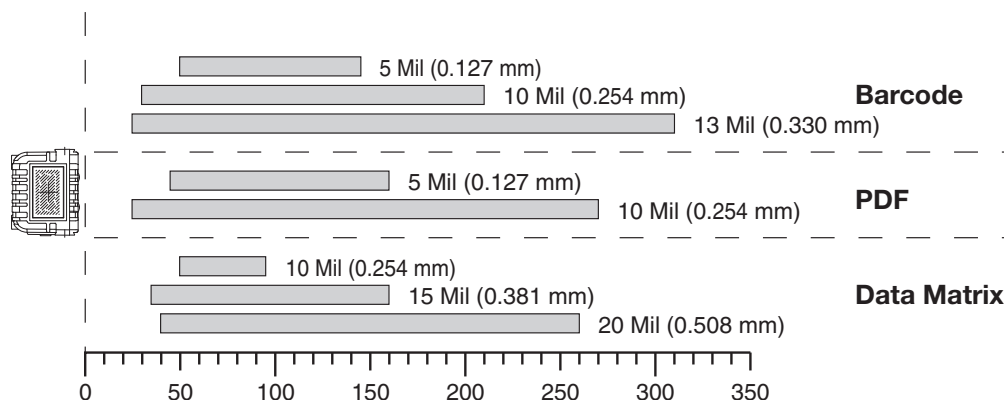


## Order guide

| 2D-code scanner | | Part No. |
|---|---|---|
| LSIS 122 M6M-R1 | Standard Range, RS 232 interface | 50110307 |

## Tables

## Diagrams

## Remarks

Very small and compact scanner for bar codes, with housing. Data transmission via configurable RS 232 interface.

● **Approved purpose**: This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.

## Configuration

The stationary scanner can always be configured via barcodes. To do this, the barcodes on the package insert must first be selected and then the trigger actuated in order to read the code. The configuration is then immediately accepted and executed.

Several of the most important configurations are listed in the following.

A second option is to configure the stationary scanner with RS232 interface with the aid of the **MetroSet 2** PC program. You can download this program from our homepage at *www.leuze.com* and install it.
The program can be used to make settings and transfer them to the stationary scanner. The configuration can also be stored so that it can be reused at a later time.

The standard applications are described and summarized below.

**Notice!**

*Additional information on the device and short instructions can be found on the Internet at www.leuze.com.*
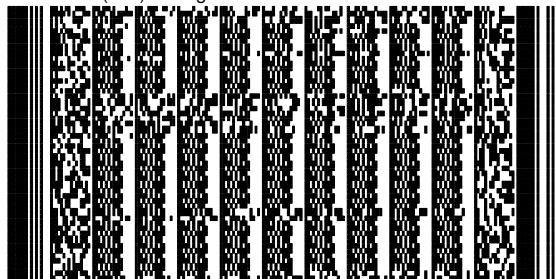
## Resetting the LSIS 122 to factory settings

To reset the LSIS 122 to factory settings, scan the barcodes below in succession. For this purpose, either the trigger button is to be activated or the SWIN is to be set to high.

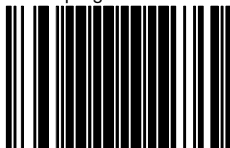1. Enter program mode
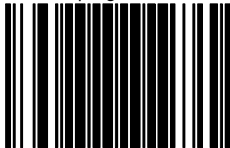


999999

2. Novram (512) Config



3. Exit program mode



999999

This results in the following settings:
- Data rate: 9600 baud, 8 data bits, 1 stop bit, no parity
- Framing protocol: STX … CR LF
- No Read character: ?
- Triggering: SWIN or serial command

# Trigger

To activate the read process, a trigger signal is to be sent via the serial RS 232 interface or USB interface (COM port emulation only). The command is to be sent at the set baud rate, parity, and data and stop bits.

| | |
|---|---|
| The activation code is: | **DC2** |
| ASCII decimal value: | 018 |
| Keyboard entry: | Ctrl+R |

To cancel read readiness, send a deactivation.

| | |
|---|---|
| The deactivation code is: | **DC4** |
| ASCII decimal value: | 020 |
| Keyboard entry: | Ctrl+T |

Following a successful read operation, the LSIS 122 deactivates itself.

The second option is activation via the switching input.