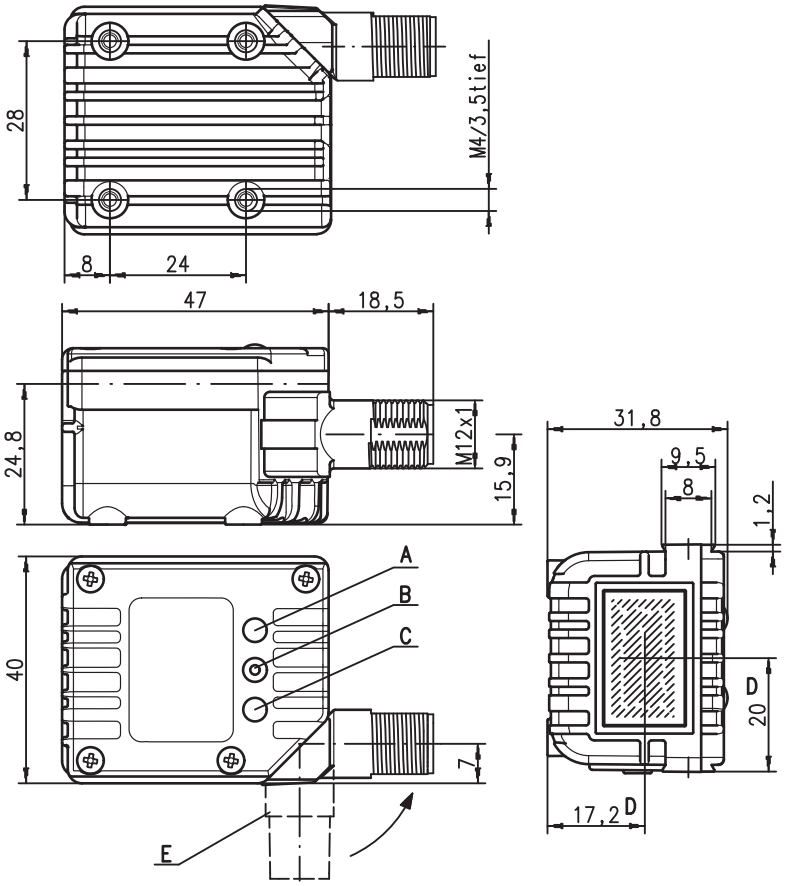
LSIS 123 M6M-R1

2D-code scanner

- 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
- USB interface
- Operating temperature from 0 through 40°C

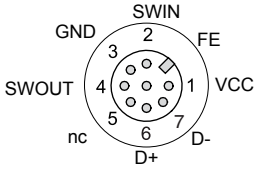
Dimensioned drawing



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 123 (USB)	8-pin connector	Signal	USB
	1	VIN	4.75 … 5.5VDC
	2	SWIN	0 … VCC
	3	GNDIN	0V
	4	SWOUT	0 … VCC
	5	nc	
	6	Data	D+ 0 … VCC
	7	Data	D- 0 … VCC
	8	FE	Shield
	Thread		

Accessories

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

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Specifications

Electrical data

Operating voltage U_B	4.75 … 5.5VDC
Power consumption	1.3W
Current consumption	260mA (at 5VDC)

Interfaces

Interface type	USB (COM port and keyboard function)
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 … 310mm (100% UPC / EAN 13)
Focal point	102mm
Read direction	omnidirectional, various tilt and rotational angles up to 45°

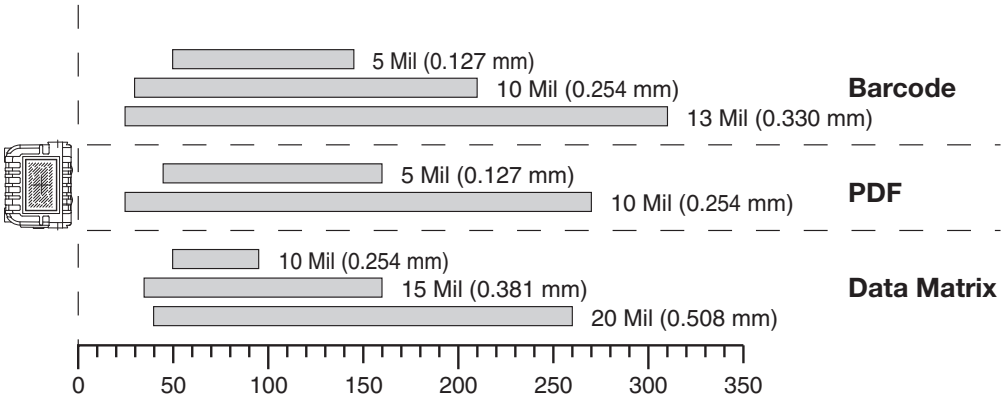
Mechanical data

Housing	diecast zinc
Weight	127g
Dimensions	47x40x32mm

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 123 M6M-R1	Standard Range, USB interface	50110306

Tables

Diagrams

Remarks

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

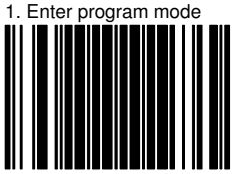
Notice!

Additional information on the device and short instructions can be found on the Internet at www.leuze.com.

Resetting the LSIS 123 to factory settings (USB keyboard emulation)

To reset the LSIS 123 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



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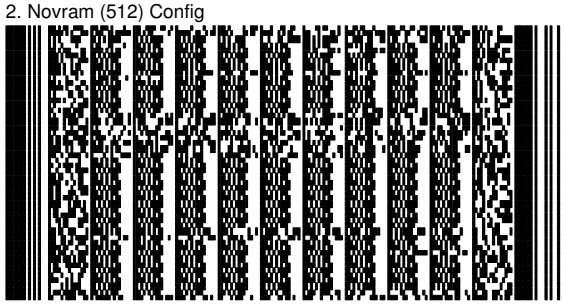
2. Novram (512) Config

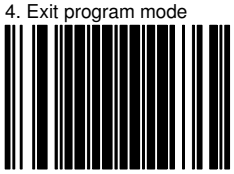


3. Extended Data Parsing

This results in the following settings:

- Data transmission: USB keyboard emulation
- German keyboard layout
- Triggering: automatic with presentation mode

4. Exit program mode



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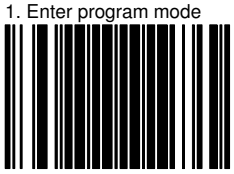
Notice!

The standard Windows keyboard driver is used!

Setting COM port emulation for the LSIS 123

To switch the LSIS 123 to the COM port emulation operating mode, scan the following barcodes in sequence. For this purpose, either the trigger button is to be activated or the SWIN is to be set to high.

1. Enter program mode



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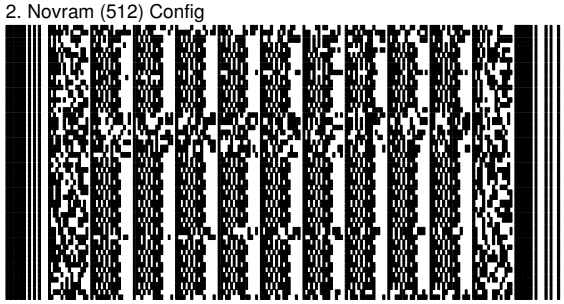
2. Novram (512) Config



3. Extended Data Parsing

This results in the following settings:

- Data transmission: COM port emulation on Windows PC
- Framing protocol: STX … CR LF
- Triggering: SWIN or serial command

4. Exit program mode

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Notice!

The USB COM port driver for the LSIS 123 from the Leuze homepage is necessary!

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 123 deactivates itself.

The second option is activation via the switching input.