

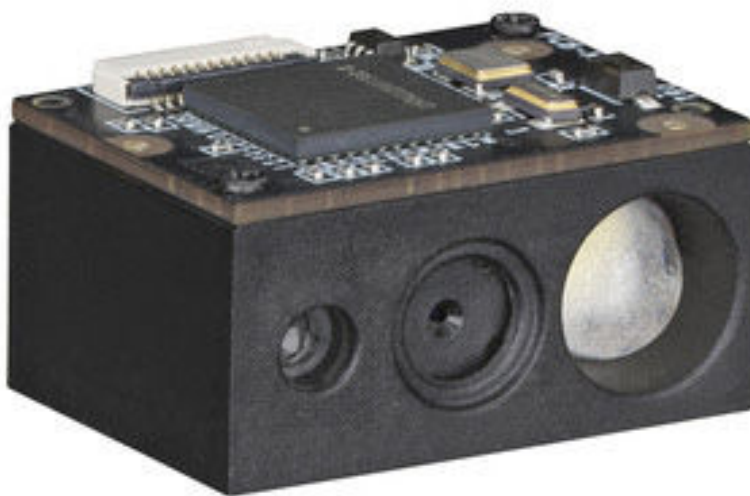
## Technical data sheet

### Stationary 2D-code reader

Part no.: 50151528  
DCR50M2/R2-S7

#### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Diagrams
- Notes
- Accessories



For illustration purposes only



## Technical data

### Basic data

|        |                       |
|--------|-----------------------|
| Series | DCR 50                |
| Chip   | CMOS (Global Shutter) |

### Special version

|                 |                    |
|-----------------|--------------------|
| Special version | Scan Engine Module |
|-----------------|--------------------|

### Functions

|                    |                     |
|--------------------|---------------------|
| Software functions | Reading of 1D codes |
|                    | Reading of 2D codes |

### Read data

|                      |                      |
|----------------------|----------------------|
| Code types, readable | 2/5 Hong Kong        |
|                      | 2/5 IATA             |
|                      | 2/5 Interleaved      |
|                      | 2/5 Straight         |
|                      | Aztec                |
|                      | Codabar              |
|                      | Code 11              |
|                      | Code 128             |
|                      | Code 32              |
|                      | Code 39              |
|                      | Code 93              |
|                      | Composite Codes      |
|                      | Data Matrix Code     |
|                      | DotCode              |
|                      | EAN 8/13             |
|                      | Grid Matrix          |
|                      | GS1 Databar Expanded |
|                      | GS1 Databar RSS 14   |
|                      | HanXin               |
|                      | Maxicode             |
|                      | Micro PDF            |
|                      | Micro QR             |
|                      | MSI Plessey          |
|                      | PDF417               |
|                      | Pharma Code          |
|                      | QR code              |
|                      | UPC-A                |
|                      | UPC-E                |

### Optical data

|                                         |                    |
|-----------------------------------------|--------------------|
| Reading distance                        | 45 ... 400 mm      |
| Camera resolution, horizontal           | 1,280 px           |
| Camera resolution, vertical             | 800 px             |
| Reading field opening angle, horizontal | 46 °               |
| Reading field opening angle, vertical   | 29 °               |
| Modulus size                            | 0.127 ... 0.528 mm |

### Electrical data

#### Performance data

|                           |                       |
|---------------------------|-----------------------|
| Supply voltage $U_B$      | 3.3 V, DC, -5 ... 5 % |
| Current consumption, max. | 230 mA                |

#### Inputs

|                                    |            |
|------------------------------------|------------|
| Number of digital switching inputs | 1 Piece(s) |
|------------------------------------|------------|

### Outputs

|                                     |            |
|-------------------------------------|------------|
| Number of digital switching outputs | 1 Piece(s) |
|-------------------------------------|------------|

#### Switching outputs

|                         |      |
|-------------------------|------|
| Voltage type            | DC   |
| Switching current, max. | 8 mA |

#### Switching output 1

|                   |                                  |
|-------------------|----------------------------------|
| Switching element | Transistor, PNP / NPN switchable |
|-------------------|----------------------------------|

### Interface

|      |              |
|------|--------------|
| Type | USB, TTL 232 |
|------|--------------|

#### TTL 232

|                    |                      |
|--------------------|----------------------|
| Data format        | Adjustable           |
| Function           | Process              |
| Transmission speed | 9,600 ... 115,200 Bd |

#### USB

|                |                    |
|----------------|--------------------|
| Function       | Process            |
| Operating mode | COM port emulation |
| Specification  | USB 2.0            |

### Connection

|                       |            |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

#### Connection 1

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| Function           | Configuration interface                                 |
|                    | Data interface                                          |
|                    | Signal IN                                               |
|                    | Signal OUT                                              |
|                    | Voltage supply                                          |
| Type of connection | 12-pin FFC, 0.5mm pitch, Maximum cable length of 100 mm |
| No. of pins        | 12 -pin                                                 |

### Mechanical data

|                       |                             |
|-----------------------|-----------------------------|
| Design                | Cubic                       |
| Dimension (W x H x L) | 21.6 mm x 11.8 mm x 15.8 mm |
| Housing material      | Plastic                     |
| Net weight            | 5 g                         |
| Housing color         | Black                       |
| Type of fastening     | Fastening thread M1.6       |

### Operation and display

|                       |          |
|-----------------------|----------|
| Type of display       | Buzzer   |
| Type of configuration | Software |

### Environmental data

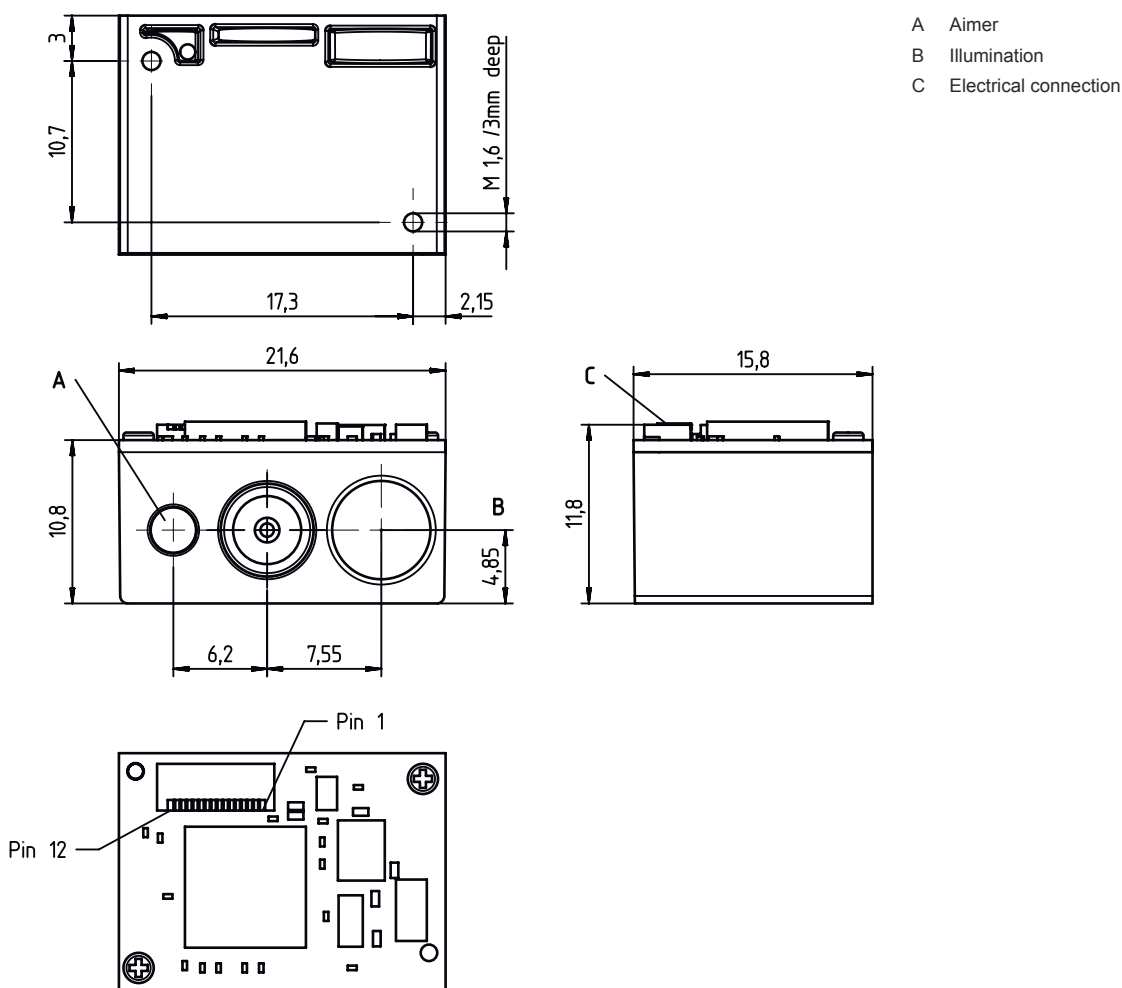
|                                    |               |
|------------------------------------|---------------|
| Ambient temperature, operation     | -10 ... 50 °C |
| Ambient temperature, storage       | -40 ... 70 °C |
| Relative humidity (non-condensing) | 5 ... 90 %    |

## Technical data

|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| ECLASS 5.1.4          | 27280103 |
| ECLASS 8.0            | 27280103 |
| ECLASS 9.0            | 27280103 |
| ECLASS 10.0           | 27280103 |
| ECLASS 11.0           | 27280103 |
| ECLASS 12.0           | 27280103 |
| ECLASS 13.0           | 27280103 |
| ECLASS 14.0           | 27280103 |
| ECLASS 15.0           | 27280103 |
| ETIM 5.0              | EC002550 |
| ETIM 6.0              | EC002999 |
| ETIM 7.0              | EC002999 |
| ETIM 8.0              | EC002999 |
| ETIM 9.0              | EC002999 |
| ETIM 10.0             | EC002999 |

## Dimensioned drawings

All dimensions in millimeters



Electrical connection

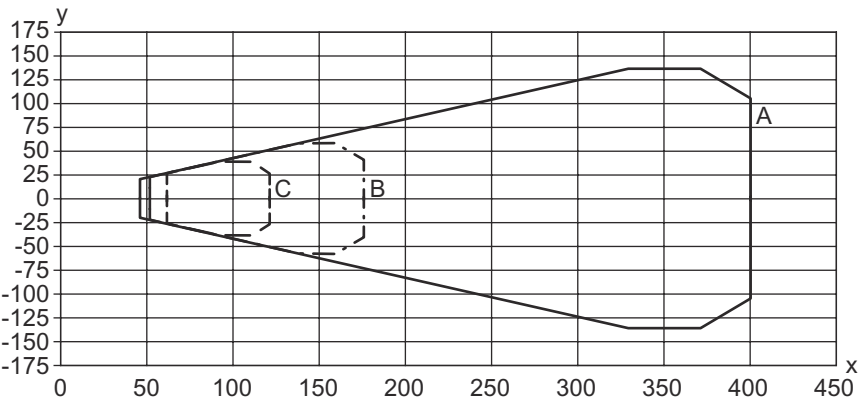
Connection 1

|                    |                                |
|--------------------|--------------------------------|
| Function           | Configuration interface        |
|                    | Data interface                 |
|                    | Signal IN                      |
|                    | Signal OUT                     |
|                    | Voltage supply                 |
| Type of connection | 12-pin FFC, 0.5mm pitch        |
| Type of connection | Maximum cable length of 100 mm |
| No. of pins        | 12 -pin                        |

| Pin | Pin assignment |
|-----|----------------|
| 1   | n.c.           |
| 2   | V+             |
| 3   | GND            |
| 4   | RxD            |
| 5   | TxD            |
| 6   | D-             |
| 7   | D+             |
| 8   | n.c.           |
| 9   | Beeper         |
| 10  | Decode LED     |
| 11  | n.c.           |
| 12  | Trigger IN     |

Diagrams

Reading field



- x Reading field distance [mm]
- y Reading field width [mm]
- A UPC EAN (0.33 mm/13 mil)
- B Code 39/Code 128 (0,1mm/4mil)
- C QR/Datamatrix code (0,18mm/7mil)

Notes

**Observe intended use!**



- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.

Accessories

Start-up/diagnosis

|                                                                                  | Part no. | Designation | Article     | Description                                                                             |
|----------------------------------------------------------------------------------|----------|-------------|-------------|-----------------------------------------------------------------------------------------|
|  | 50151531 | MA-DCR50-S7 | Adapter set | Description: Adapter circuit board for laboratory and test purposes, open circuit board |

Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.