



Figure can vary

**Part no.: 50138136**  
**IT 1920i DPM-3**  
**Mobile 2D-code reader**



## Contents

- Technical data
- Electrical connection
- Diagrams
- Operation and display
- Notes
- Accessories

Part no.: 50138136 – IT 1920i DPM-3 – Mobile 2D-code reader

## Technical data

| <b>Basic data</b>             |   |
|-------------------------------|---|
| Series                        | IT19xx  |
| <b>Read data</b>              |   |
| Code types, readable          | 2/5 Interleaved<br>Codabar<br>Code 39<br>Code 93<br>Data Matrix Code<br>Directly-marked 2D-codes<br>EAN 8/13<br>GS1 Databar<br>Micro PDF<br>Micro QR<br>Others on request<br>PDF417<br>QR code<br>UPC |
| <b>Optical data</b>           |   |
| Reading distance              | 0 ... 170 mm  |
| Light source                  | LED   |
| LED group                     | 1   |
| Camera resolution, horizontal | 844 px  |
| Camera resolution, vertical   | 640 px  |
| Bar code contrast (PCS)       | 25 %  |
| Modulus size                  | 0.076 ... 0.508 mm  |
| Alignment aid                 | Laser, red  |
| Light wavelength              | 650 nm  |
| <b>Electrical data</b>        |   |
| <b>Performance data</b>       |   |
| Supply voltage U <sub>B</sub> | 4 ... 5.5 V , DC  |
| Power consumption, max.       | 2.35 W  |
| <b>Interface</b>              |   |
| Type                          | PS/2 , RS 232 , USB   |
| <b>RS 232</b>                 |   |
| Function                      | Process   |
| <b>USB</b>                    |   |
| Function                      | Process   |
| <b>Connection</b>             |   |
| <b>Connection 1</b>           |   |
| Type of connection            | RJ41  |
| <b>Mechanical data</b>        |   |
| Dimension (W x H x L)         | 74.5 mm x 193 mm x 134 mm   |
| Housing material              | Plastic , PC-ABS  |
| Net weight                    | 310 g   |
| <b>Environmental data</b>     |   |

## Part no.: 50138136 – IT 1920i DPM-3 – Mobile 2D-code reader

|                                    |                |
|------------------------------------|----------------|
| Ambient temperature, operation     | -30 ... 50 °C  |
| Ambient temperature, storage       | -40 ... 70 °C  |
| Relative humidity (non-condensing) | 0 ... 95 %     |
| Drop height                        | 2 m            |
| Measurements relative to           | Concrete floor |

### Certifications

|                      |       |
|----------------------|-------|
| Degree of protection | IP 65 |
|----------------------|-------|

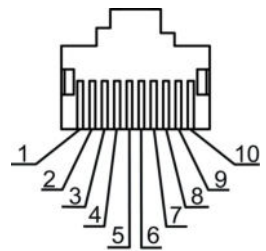
### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| eCl@ss 8.0            | 27280103 |
| eCl@ss 9.0            | 27280103 |
| ETIM 5.0              | EC002999 |
| ETIM 6.0              | EC002999 |

## Electrical connection

| Connection 1       |   |
|--------------------|---|
| Type of connection | RJ41  |
| Function           | Configuration interface<br>Data interface<br>Voltage supply |

| Pin | Pin assignment           |
|-----|--------------------------|
| 1   | Shield                   |
| 2   | Cable ID                 |
| 3   | GND                      |
| 4   | TxD RS 232 / n.c. USB    |
| 5   | RxD RS 232 / n.c. USB    |
| 6   | CTS RS 232 / n.c. USB    |
| 7   | +5 V DC                  |
| 8   | RTS RS 232 / n.c. USB    |
| 9   | n.c. RS 232 / Data + USB |
| 10  | n.c. RS 232 / Data - USB |



## Diagrams

### Reading field

|                         | A [mil]   | B [mm] | C [mm] | D [mm] |
|-------------------------|-----------|--------|--------|--------|
| <b>Code 39</b>          | 3         | 0,076  | 27,9   | 40,6   |
|                         | 5         | 0,127  | 0      | 88,9   |
|                         | 7,5       | 0,191  | 0      | 137,2  |
|                         | 20        | 0,508  | 27,9   | 233,7  |
| <b>UPC/EAN 13</b>       | 13 (100%) | 0,330  | 20,3   | 157,5  |
| <b>PDF 417</b>          | 6,67      | 0,169  | 0      | 94,0   |
|                         | 10        | 0,254  | 0      | 114,3  |
|                         | 15        | 0,381  | 0      | 142,2  |
| <b>Data Matrix Code</b> | 4         | 0,102  | 25,4   | 53,3   |
|                         | 5         | 0,127  | 10,2   | 68,6   |
|                         | 7,5       | 0,191  | 0      | 88,9   |
|                         | 10        | 0,254  | 0      | 111,8  |
| <b>QR Code</b>          | 4         | 0,102  | 27,9   | 35,6   |
|                         | 5         | 0,127  | 12,7   | 55,9   |
|                         | 7,5       | 0,191  | 0      | 83,8   |
|                         | 10        | 0,254  | 0      | 101,6  |

A Module size [mil]  
 B Modulus size [mm]  
 C From [mm]  
 D To [mm]

NOTE Please notice that the real reading distances are also influenced by factors such as labeling material, printing quality, reading angle, printing contrast etc., and may thus deviate from the reading distances specified here.

## Operation and display

### LEDs

| LED | Display          | Meaning            |                     |
|-----|------------------|--------------------|---------------------|
| 1   | Normal operation | Red, 1x flashing   | Reading successful  |
|     |                  | Red, flashing      | Communication error |
|     |                  | Green, 1x flashing | Reading successful  |

## 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.

**WARNING! LASER RADIATION – LASER CLASS 2**

**Never look directly into the beam!**

The device satisfies the requirements of IEC 60825-1:2007 (EN 60825-1:2007) safety regulations for a product of **laser class 2** as well as the U.S. 21 CFR 1040.10 regulations with deviations corresponding to "Laser Notice No. 50" from June 24, 2007.

- Never look directly into the laser beam or in the direction of reflected laser beams! If you look into the beam path over a longer time period, there is a risk of injury to the retina.
- Do not point the laser beam of the device at persons!
- Interrupt the laser beam using a non-transparent, non-reflective object if the laser beam is accidentally directed towards a person.
- When mounting and aligning the device, avoid reflections of the laser beam off reflective surfaces!
- CAUTION! Use of controls or adjustments or performance of procedures other than specified herein may result in hazardous light exposure.
- Observe the applicable statutory and local laser protection regulations.
- The device must not be tampered with and must not be changed in any way.  
There are no user-serviceable parts inside the device.  
Repairs must only be performed by Leuze electronic GmbH + Co. KG.

**NOTE**


**Affix laser information and warning signs!**

Laser information and warning signs are affixed to the device. In addition, self-adhesive laser information and warning signs (stick-on labels) are supplied in several languages.


- Affix the laser information sheet to the device in the language appropriate for the place of use. When using the device in the US, use the stick-on label with the "Complies with 21 CFR 1040.10" note.
- Affix the laser information and warning signs near the device if no signs are attached to the device (e.g. because the device is too small) or if the attached laser information and warning signs are concealed due to the installation position.
- Affix the laser information and warning signs so that they are legible without exposing the reader to the laser radiation of the device or other optical radiation.

**Accessories**

Connection technology - Connection unit


|   | Part no. | Designation              | Article                 | Description  |
|---|----------|--------------------------|-------------------------|--|
|  | 50112893 | MA 204i Profibus Gateway | Modular connection unit | Supply voltage: 18 ... 30 V<br>Current consumption, max.: 300 mA<br>Interface: PROFIBUS DP, RS 232<br>Connections: 6 Piece(s)<br>Degree of protection: IP 65 |

Connection technology - Interconnection cables


|   | Part no. | Designation   | Article          | Description   |
|---|----------|---------------|------------------|---|
|  | 50113397 | KB JST-HS-300 | Connection cable | Suitable for interface: RS 232<br>Connection 1: JST ZHR<br>Connection 2: Sub-D, Axial, Male, 9 -pin<br>Shielded: Yes<br>Cable length: 300 mm<br>Sheathing material: PUR |

Part no.: 50138136 – IT 1920i DPM-3 – Mobile 2D-code reader

## Connection technology - Y distribution cables

|   | Part no. | Designation     | Article               | Description  |
|---|----------|-----------------|-----------------------|--|
|  | 50114517 | KB 232-1 IT190x | Interconnection cable | Suitable for interface: RS 232, TTL<br>Connection 1: Sub-D, Axial, Female, 9 -pin<br>Connection 2: RJ41<br>Connection 3: Connector, Pluggable, Axial, Female, 2 -pin<br>Shielded: Yes<br>Cable length: 3,000 mm<br>Sheathing material: PVC |

## Mounting technology - Other

|   | Part no. | Designation          | Article    | Description   |
|---|----------|----------------------|------------|---|
|  | 50120444 | BT Wallholder HS65x8 | Wall mount | Design of mounting device: Wall mounting<br>Fastening, at system: Through-hole mounting<br>Mounting bracket, at device: insertable<br>Material: Plastic |

### Note

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