

## Technical data sheet Mobile 2D-code reader

Part no.: 50143599

IT 1470g-2D-2



For illustration purposes only

### Contents

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



## Technical data

### Basic data

|        |         |
|--------|---------|
| Series | IT147xg |
|--------|---------|

### Read data

|                      |                             |
|----------------------|-----------------------------|
| Code types, readable | 2/5 Interleaved             |
|                      | Codabar                     |
|                      | Codablock                   |
|                      | Code 128                    |
|                      | Code 39                     |
|                      | Code 93                     |
|                      | Data Matrix Code            |
|                      | DotCode                     |
|                      | EAN 128                     |
|                      | EAN 8/13                    |
|                      | EAN Addendum                |
|                      | GS1 Databar                 |
|                      | GS1 Databar Expanded        |
|                      | GS1 Databar Limited         |
|                      | GS1 Databar Omnidirectional |
|                      | GS1 Databar Stacked         |
|                      | GS1 Databar Truncated       |
|                      | PDF417                      |
|                      | QR code                     |
|                      | UPC                         |

### Optical data

|                               |                    |
|-------------------------------|--------------------|
| Reading distance              | 5 ... 400 mm       |
| Light source                  | LED, Red           |
| LED group                     | 1                  |
| Camera resolution, horizontal | 1,040 px           |
| Camera resolution, vertical   | 720 px             |
| Bar code contrast (PCS)       | 35 %               |
| Modulus size                  | 0.127 ... 0.508 mm |

### Electrical data

|                         |                 |
|-------------------------|-----------------|
| Performance data        |                 |
| Supply voltage $U_B$    | 4 ... 5.5 V, DC |
| Power consumption, max. | 2 W             |

### Interface

|      |             |
|------|-------------|
| Type | RS 232, USB |
|------|-------------|

|          |         |
|----------|---------|
| RS 232   |         |
| Function | Process |

### USB

|          |         |
|----------|---------|
| Function | Process |
|----------|---------|

### Connection

#### Connection 1

|                    |      |
|--------------------|------|
| Type of connection | RJ41 |
|--------------------|------|

### Mechanical data

|                       |                        |
|-----------------------|------------------------|
| Dimension (W x H x L) | 62 mm x 169 mm x 82 mm |
| Housing material      | Plastic                |
| Plastic housing       | UL 94-V0               |
| Net weight            | 130 g                  |

### Environmental data

|                                    |                |
|------------------------------------|----------------|
| Ambient temperature, operation     | 0 ... 50 °C    |
| Ambient temperature, storage       | -40 ... 60 °C  |
| Relative humidity (non-condensing) | 0 ... 95 %     |
| Drop height                        | 1.8 m          |
| Measurements relative to           | Concrete floor |

### Certifications

|                      |         |
|----------------------|---------|
| Degree of protection | IP 40   |
| Approvals            | c UL US |

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| ECLASS 5.1.4          | 27280101 |
| ECLASS 8.0            | 27280101 |
| 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 |
| ECLASS 16.0           | 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 |

## Electrical connection

### Connection 1

|                    |                         |
|--------------------|-------------------------|
| Function           | Configuration interface |
|                    | Data interface          |
|                    | Service interface       |
|                    |                         |
| Type of connection | RJ41                    |

Electrical connection

| 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

Typical reading behavior

|                  | A [mil] | B [mm] | C [mm] | D [mm] |
|------------------|---------|--------|--------|--------|
| Code 39          | 5       | 0,127  | 20     | 205    |
| UPC/EAN 13       | 13      | 0,33   | 18     | 400    |
| PDF 417          | 6,7     | 0,169  | 15     | 185    |
| Data Matrix Code | 10      | 0,254  | 10     | 165    |
| QR Code          | 20      | 0,508  | 5      | 325    |

|   |                   |           |                                  |
|---|-------------------|-----------|----------------------------------|
| A | Module size [mil] | D         | To [mm]                          |
| B | Modulus size [mm] | ATTENTION | Please observe the note below    |
| C | From [mm]         | !         | regarding the reading distances. |

Operation and display

| LED | Display            | Meaning            |
|-----|--------------------|--------------------|
| 1   | Green, 1x flashing | Reading successful |
|     | Red                | No reading result  |

Accessories

Connection technology - Connection unit

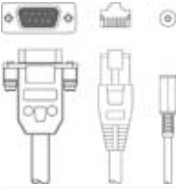
|                                                                                    | Part no. | Designation              | Article                 | Description                                                                                                                                                   |
|------------------------------------------------------------------------------------|----------|--------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 50112891 | MA 248i Profinet Gateway | Modular connection unit | Supply voltage: 18 ... 30 V, DC<br>Current consumption, max.: 300 mA<br>Interface: RS 232, PROFINET<br>Connections: 6 Piece(s)<br>Degree of protection: IP 65 |

## Accessories

### Connection technology - Interconnection cables

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

### 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: RJ41<br>Connection 2: Sub-D, Axial, Female, 9 -pin<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 website in the Download tab of the article detailed page.