SMART SENSOR BUSINESS

Leuze electronic
the *sensor* people

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

IP 65

Figure can vary

Contents

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

Technical data

Basic data	
Series	IT19xx

Read data	
Code types, readable	Directly-marked 2D-codes GS1 Databar Micro PDF Data Matrix Code Micro QR Codabar UPC Code 93 Code 39 Pharma Code Others on request QR code EAN 8/13 PDF417 2/5 Interleaved

Optical data	
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 %
Module size	0.076 ... 0.508 mm
Alignment aid	Laser, red
Light wavelength	650 nm

Electrical data	
Performance data	
Supply voltage U_B	4 ... 5.5 V, DC
Power consumption, max.	2.35 W

Interface	
Type	PS/2, 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)	74.5 mm x 193 mm x 134 mm
Housing material	Plastic, PC-ABS
Net weight	310 g

Environmental data

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 Data interface 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

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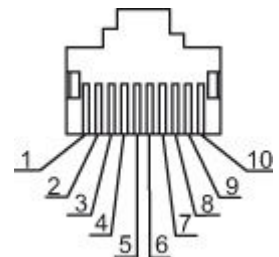
Diagrams

Reading field

	A [mil]	B [mm]	C [mm]	D [mm]
Code 39	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
UPC/EAN 13	13 (100%)	0,330	20,3	157,5
PDF 417	6,67	0,169	0	94,0
	10	0,254	0	114,3
	15	0,381	0	142,2
Data Matrix Code	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
QR Code	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	Module 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

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Notes

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.
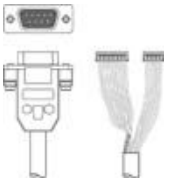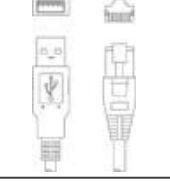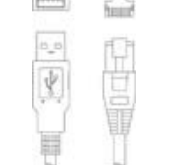
Accessories

Connection technology - Connection unit

	Part no.	Designation	Article	Description
	50112893	MA 204i Profibus Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: PROFIBUS DP, RS 232 Connections: 6 Piece(s) Degree of protection: IP 65
	50112892	MA 208i Ethernet Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: Ethernet, RS 232 Connections: 6 Piece(s) Degree of protection: IP 65

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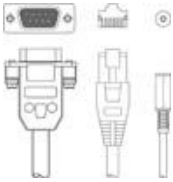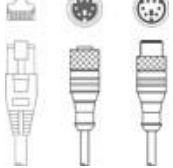|	Part no.	Designation	Article	Description
	50114155	MA 238i EtherCAT Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: EtherCAT, RS 232 Connections: 6 Piece(s) Degree of protection: IP 65
	50112891	MA 248i Profinet Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: PROFINET, RS 232 Connections: 6 Piece(s) Degree of protection: IP 65
	50114156	MA 255i DeviceNet Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: RS 232, DeviceNet Connections: 6 Piece(s) Degree of protection: IP 67
	50114157	MA 258i EtherNet/IP Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: EtherNet IP, RS 232 Connections: 6 Piece(s) 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 Connection 1: JST ZHR Connection 2: Sub-D, Axial, Male, 9 -pin Shielded: Yes Cable length: 300 mm Sheathing material: PUR
	50114521	KB USB-1 IT190x	Interconnection cable	Suitable for interface: USB Connection 1: USB Connection 2: RJ41 Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC
	50114523	KB USB-2 IT190x	Interconnection cable	Suitable for interface: USB Connection 1: USB Connection 2: RJ41 Shielded: Yes Cable length: 5,000 mm Sheathing material: PVC

Connection technology - Y distribution cables

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

	Part no.	Designation	Article	Description
	50115105	KB 232-2 IT190x	Interconnection cable	Suitable for interface: RS 232 Connection 1: Sub-D, Axial, Female, 9 -pin Connection 2: RJ41 Connection 3: Connector, Pluggable, Axial, Male, 2 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC
	50128800	KB 232-3 IT190x	Interconnection cable	Suitable for interface: RS 232, TTL Connection 1: Sub-D, Axial, Female, 9 -pin Connection 2: RJ41 Connection 3: Connector, Pluggable, Axial, Female, 2 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PVC
	50114519	KB PS2-1 IT190x	Interconnection cable	Suitable for interface: PS/2 Connection 1: PS/2 Connection 2: RJ41, female Connection 3: PS/2 Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC

Mounting technology - Other

	Part no.	Designation	Article	Description
	50107034	BT Rope IT	Rope mounting bracket	Fastening, at system: Suspended (rope) Mounting bracket, at device: insertable Material: Plastic
	50128795	BT Stand 30 IT 191x	Mounting bracket	Functions: Activation of presentation mode Design of mounting device: Table foot Fastening, at system: Self-supporting Mounting bracket, at device: insertable Material: Plastic
	50120444	BT Wallholder HS65x8	Wall mount	Design of mounting device: Wall mounting Fastening, at system: Through-hole mounting Mounting bracket, at device: insertable Material: Plastic

Power supply units

	Part no.	Designation	Article	Description
	50114525	NT f. IT 1900+Base-EU	Power supply unit	Type of power supply unit: Plug-in power supply unit Output: 5 V DC, 1 A Input: 110..240 V AC, 50..60 Hz

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