



Figure can vary

**Part no.: 50130495**  
**IT 1981i FR-3**  
**Wireless mobile 2D-code reader**



## Contents

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

## Technical data

### Basic data

Series	IT19xx
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### Read data

Code types, readable	Micro PDF GS1 Databar Stacked EAN 128 UPC Others on request Composite Codes GS1 Databar Code 39 GS1 Databar Expanded Code 128 Code 93 EAN Addendum GS1 Databar Truncated EAN 8/13 GS1 Databar Omnidirectional QR code PDF417 2/5 Interleaved Aztec GS1 Databar Limited Data Matrix Code Maxicode Micro QR Codabar
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### Optical data

Reading distance	100 ... 16,000 mm
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### Electrical data

#### Performance data

Supply voltage $U_B$	3.7 V, DC,
Power consumption, max.	1.8 W
Battery technology	Lilon
Battery storage capacity	2 A·h

### Interface

Type	PS/2, RS 232, USB
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#### RS 232

Function	Process
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#### USB

Function	Process
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### Connection

Bluetooth range	Class 1
Bluetooth version	2.1

#### Connection 1

Type of connection	Bluetooth
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### Mechanical data

Dimension (W x H x L)	75 mm x 133 mm x 195 mm
Housing material	Plastic, UL 94-V0
Net weight	420 g

#### Environmental data

Ambient temperature, operation	-20 ... 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
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#### 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	Bluetooth
Function	Data interface Configuration interface

## Operation and display

### LEDs

LED	Display	Meaning	
1	Normal operation	Red, continuous light	Low battery level
		Green, continuous light	Operational readiness
		Red, flashing	Communication error
		Green, 1x flashing	Reading successful

## 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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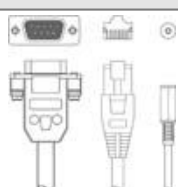
	Part no.	Designation	Article	Description
	50114154	MA 235i CANopen Gateway	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 300 mA Interface: CANopen, RS 232 Connections: 6 Piece(s) Degree of protection: IP 65
	50114155	MA 238i EtherCAT Gateway	Modular connection unit	Supply 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 - Base stations**

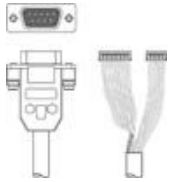


	Part no.	Designation	Article	Description
	50115738	Access Point f. IT	Base station	Interface: USB, RS 232 Bluetooth range: Class 2 Bluetooth version: 2.1 Connection 1: Bluetooth Connection 2: RJ41
	50122431 *	Base f. IT 1911	Base station	Interface: PS/2, USB, RS 232 Bluetooth range: Class 1 Bluetooth version: 2.1 Connection 1: RJ41 Connection 2: Jack socket Connection 3: Bluetooth Drop height: 1.2 m Degree of protection: IP 51

\* Necessary accessories, please order separately

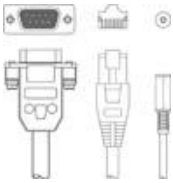
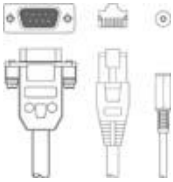
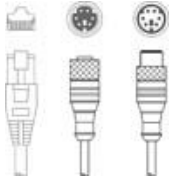
**Connection technology - Interconnection cables**

	Part no.	Designation	Article	Description
	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



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	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
	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
	50114494	BAT-Charger-4 Desk-EU	Charging station	Supply voltage: 100 ... 240 V, AC Battery sockets: 4 Piece(s)
	50107034	BT Rope IT	Rope mounting bracket	Fastening, at system: Suspended (rope) Mounting bracket, at device: insertable Material: Plastic

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	Part no.	Designation	Article	Description
	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
	50123862 *	NT Base IT1911-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

\* Necessary accessories, please order separately

## Replacement part

	Part no.	Designation	Article	Description
	50105384	Battery IT-series	Battery	Supply voltage: 3.7 V, DC Battery technology: Lilon Battery storage capacity: 2.4 A·h