Technical data sheet
Mobile 2D-code reader
Part no.: 50144928

IT 1990i XR-3

Leuze

For Illustration purposes only

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IP 65 IP 67

Technical data

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Basic data

Series	IT19xx

Read data

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

Optical data

Reading distance	0 ... 2,236 mm
Camera resolution, horizontal	1,280 px
Camera resolution, vertical	800 px

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)	76 mm x 100 mm x 192 mm
Housing material	Plastic
Plastic housing	UL 94-V0
Net weight	320 g

Environmental data

Ambient temperature, operation	-30 ... 50 °C
Ambient temperature, storage	-40 ... 70 °C
Relative humidity (non-condensing)	0 ... 95 %
Drop height	3 m
Measurements relative to	Concrete floor

Certifications

Degree of protection	IP 65
	IP 67

Classification

Customs tariff number	84719000
ECLASS 5.1.4	27280101
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

Electrical connection

Connection 1

Function	Configuration interface
	Data 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	220
	20	0,508	0	2236
	100	2,54	50	10000
UPC/EAN 13	13	0,33	0	1520
PDF 417	6,7	0,169	20	209
Data Matrix Code	10	0,254	30	220
QR Code	20	0,508	33	484

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

Operation and display

LED		Display	Meaning
1	**Normal operation**	Green, 1x flashing	Reading successful
		Red, continuous light	Communication error

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.

⚠	**ATTENTION! LASER RADIATION – CLASS 2 LASER PRODUCT**

Do not stare into 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! The use of operating and adjusting devices other than those specified here or the carrying out of differing procedures may lead to dangerous exposure to radiation!

- 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.

ℹ	**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.

ℹ	**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.
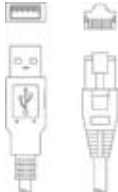

Accessories
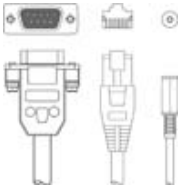
Connection technology - Connection unit

	Part no.	Designation	Article	Description
	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

The Sensor People

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Accessories

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Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50113397	KB JST-HS-300	Interconnection cable	Suitable for interface: RS 232 Connection 1: JST ZHR connector 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

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: RJ41 Connection 2: Sub-D, Axial, Female, 9 -pin Connection 3: Connector, Pluggable, Axial, Female, 2 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC

Mounting technology - Other

	Part no.	Designation	Article	Description
	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

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