IT 4600 and IT 4620/2020
Bar Code Hand-Held Scanner

Hand-Held Line

SICK
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IT 4600 Bar Code Hand-Held Scanner

IT 4600 – Identification of 2-D Codes with new Adaptus™ Imaging Technology

SICK has positioned the IT 4600 as a solution for the future market of 2-D code identification.

The hand-held scanner IT 4600 identifies reliably two-dimensional (2-D) symbologies (e.g. Data Matrix) and even all popular linear bar codes or stacked bar codes (e.g. Code 128 or PDF 417). In addition this unit is also able of automatically capturing OCR fonts, signatures and standard text.

A new innovative, minimised matrix camera technology combined with extremely improved decode algorithms facilitates high performance code and font identification. This video technology is also building the basis for omnidirectional scanning for any code symbology.

The IT 4600 has no moving parts, the housing is mounted with steel screws and is protected against impact by rubber bumpers. These measures result in a high degree of robustness and stability.

The universally designed data transmission interface enables any connection of the IT 4600 to the most common PCs or terminals. The hand-held scanner transmits the decoded information to a terminal or host over keyboard wedge/emulation, RS 232, USB or wand emulation for further processing.

Its ergonomic design, robustness, fast and reliable identification of 1-D and 2-D codes make the IT 4600 the ideal choice for daily applications in offices, warehouses, logistics and for light industrial environment.

Your benefits:

- Fast and reliable identification of poor quality matrix codes
- Identification of all popular linear bar codes
- OCR font identification
- Bright intuitive aiming line
- Omnidirectional scanning
- Connection to various interfaces
- Easy-to-use due to configuration via bar codes
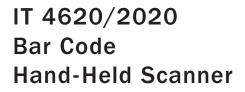- Setup software for easy and clear programming

The IT 4600 at a glance:

- Reading distance up to 315 mm
- Optical and acoustic good read signal
- Manual trigger
- Flash memory for software update
- Robust, compact housing
- Ergonomic design
- 3 years warranty

IT 4620/2020
Bar Code
Hand-Held Scanner

IT 4620/2020 – Cordless identification of 2-D codes with Bluetooth™

The most outstanding feature of the IT 4620 hand-held scanner is the cordless data transmission via Bluetooth™. After successfully reading a bar code the decoded data is transmitted over a cordless connection to the paired IT 2020 base station.

The integrated Matrix camera makes it possible to read all common 1-D and 2-D codes omnidirectionally, meaning independantly from code orientation.

The automatic RF connection allows transmissions of up to 10 m. Beyond this operating range the scanner automatically makes use of a so-called batch function. By using this function it is possible to buffer up to 500, 12-digit bar codes within the scanner. After re-entering the operating range, the stored data is transmitted to the base unit, following the FIFO-method. Through this the roaming radius of the operator increases dramatically. Additionally safety conditions are improved because accidents as a result of cables becoming entangled in equipment and machinery can be eliminated.

The base station IT 2020 optionally supports up to 7 cordless scanners IT 4620 simultaneously – each can be programmed to solve various application tasks. An universally designed data transmission interface allows the base station to be connected to most common PCs or terminals. The decoded information is then transmitted to a terminal or host over keyboard wedge/emulation, RS 232, USB or wand emulation for further processing.

Using Bluetooth™ technology the IT 4620 allows direct communication with other Bluetooth™ devices. A separate charging station ensures the scanners can be recharged when not in use.

For RF communication between the hand-held scanner IT 4620 and the base station IT 2020 a very robust data transmission based on adaptive frequency hopping at the 2.4 GHz ISM band is used. Interference between WLAN, other Bluetooth™ or 433/908 MHz systems can be excluded.

The power supply of the hand-held scanner IT 4620 is based on a lithium-ion battery pack, which allows a long operating time without memory effects. The base station IT 2020 works simultaneously as charging station.

The innovative combination of Bluetooth™ RF technology, ergonomic design, robustness, fast and reliable identification of 1-D and 2-D codes makes the IT 4620 the ideal choice for daily applications in offices, warehouses, logistics and for light industrial environments.

Your benefits:

- Increased mobility of the operator
- Omnidirectional identification of 1-D and 2-D codes
- License-free RF system delivers fast and reliable communication
- Lithium-ion battery pack without memory effect
- Integrated algorithms for OCR-identification
- Communication, charging and stand functionality in one base
- Optionally up to 7 scanners communicate with one base station

The IT 4620/2020 at a glance:

- Cordless identification of all common 1-D and 2-D codes
- 10 m RF operating radius
- Buffering of bar codes beyond operating range
- 2.4 GHz radio frequency with frequency hopping acc. to Bluetooth™ V1.2
- 3 years warranty

Technical data

Type	IT 4600	IT 4620	IT 2020
Product	Hand-held 2-D Imager		Base and charging station
Light source	Illumination LED: Visible red light (λ= 630 nm) Aiming LED: Visible green light (λ= 530 nm)		
Ambient light compatibility	Max. 100,000 lux		
Versions	IT 46xx SR Standard Range Imager IT 46xx SF Smart Focus Imager		
Reading distance	36 to 210 mm (SF version) 36 to 315 mm (SR version)		
Reading width	110 x 146 mm² at 213 mm reading distance (SR version)		
Min. resolution	0.20 mm/0.19 mm (SR/SF) with Linear bar code 0.38 mm/0.25 mm (SR/SF) with Datamatrix code		
Code types	- Matrixcodes: Maxicode, Datamatrix, QR-Code, Atztec - OCR Fonts: OCR-A, OCR-B - Stacked bar codes: PDF 417, Micro PDF, Code 49 - Linear bar codes: all popular symbologies, Postnet		
Batchfunction		500 codes (UPC) with 12 digits	
Optical indicators	LED for Good read	LED for Good read, low battery and RF communication status	LED for data transmission, system and battery power status
Acoustical indicators	Beeper for Good read	Beeper for Good read and RF communication status	Beeper for system status and RF communication status
RF and data interface	IT 4600 and IT 2020: - Keyboard wedge for PCs and terminals, USB, RS 232 (TTL-Level), wand emulation, optional (IT 4600 only) Laser-Out (HHLC) and RS 232 True Only IT 4620 and IT 2020: - Bluetooth™ V1.2, Class 2/10 m RF operating radius/Batch function to expand operating radius		
Operating voltage	4.5 V to 14 V DC	3.6 V DC(Li-Ion battery pack)	4.5 V to 12 V DC
Current consumption	at 5 V DC: 375 mA (Standby 46 mA)		at 9 V DC: 750 mA (max. charging)
Enclosure rating	IP 41		
EMC Test	EN 55022 Class B, EN 55024:1998, EN 61000-3-2, EN 61000-3-3	EN 55022 Class B, EN301 489-1, 17, EN 300 328-1, 2	
Mechanical shock	50 drops from 1.8 m to concrete		50 drops form 1.2 m to concrete
Vibration	Withstands 5g peak from 22 up to 300 Hz		
MTBF	> 80,000 h (Ground-Benign acc. to MIL-HDBK-217F)		
Weight	Approx. 185 g (without cable)	260 g (incl. battery pack)	205 g (without cable)
Dimensions	157 mm x 135 mm x 81 mm		79 mm x 142 mm x 109 mm
Temperature (operating/storage)	0 °C to +50 °C/–40 °C to +60 °C	0 °C to +50 °C/–20 °C to +35 °C	0 °C to +50 °C/–40 °C to +60 °C
Rel. humidity	0 to 95 %, non-condensing		
Exchangeable Li-Ion battery		1,600 mAh capacity max. 20,000 scans max. 4 h charging time	

Tethered

Order No	Type	Description
6 028 680*)	IT 4600SR 031C	Hand-Held 2-D Imager, RS 232 True
6 028 681*)	IT 4600SR 051C	Hand-Held 2-D Imager, RS 232 TTL, wand emulation, keyboard wedge, USB
6 028 636*)	IT 4600SF 031C	Hand-Held 2-D Imager, RS 232 True
6 028 637*)	IT 4600SF 051C	Hand-Held 2-D Imager, RS 232 TTL, wand emulation, keyboard wedge, USB

Cordless

Order No	Type	Description
6 030 144*)	IT 4620SR 0C1C-0G00	Kit consisting of IT 4620SR 0C1C, IT 2020-5 and System Manual
6 029 310	IT 4620SR 0C1C	Hand-Held 2-D Imager, Bluetooth™ V1.2, incl. Lithium-Ion-battery
6 029 309	IT 4620SF 0C1C	Hand-Held 2-D Imager, Bluetooth™ V1.2, incl. Lithium-Ion-battery
6 029 312*)	IT 2020-5	Base- and charging station, Bluetooth™ V1.2, RS 232 TTL,wand emulation, keyboard wedge, USB
6 029 317		Lithium-Ion battery pack (spare part)
6 029 319*)	IT 2020-CB	Charging station IT 4620 (for operation with alternative Bluetooth™ devices)
On request		Additional products such as interface cables for connection to various terminals and keyboards or power supply unit and other accessories

*) For setting-up operation an interface cable and if necessary a power supply unit are additionally required.

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