

# IT3820/2020 Bar Code Hand-held Scanner



## Hand-held Line



### IT3820/2020 – more liberty of action through cordless Bluetooth™ technology

The most outstanding feature of this hand-held scanner IT3820 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 IT2020 base station. 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. The base station IT2020 optionally supports up to seven cordless scanners IT3820 simultaneously – each can be programmed to solve various application tasks. The universally designed data transmission interface

allows the IT2020 to be connected to most common PCs or terminals. Using Bluetooth™ technology the IT3820 allows direct communication with other Bluetooth™ devices. Then a separate charging station ensures that the scanners can be recharged when not in use.

For RF communication between the IT3820 and the base station IT2020 a very robust data transmission based on frequency hopping at the 2.4 GHz ISM band is used. Interference between WLAN, other Bluetooth™ or 433/908 MHz systems can also be excluded.

The power supply of the IT3820 is based on a Lithium-ion battery pack, which allows a long operating time without memory effects. The innovative combination of Bluetooth™ RF technology, ergonomic design, robustness, as well as fast and reliable identification of linear bar codes makes the IT3820 the ideal choice for daily applications in offices, warehouses and logistics or for light industrial environments.

#### Your benefits:

- Increased mobility of the operator
- License-free RF system delivers fast and reliable communication
- Lithium-ion battery pack without memory effect
- Optionally up to seven scanners communicate with one base station
- Setup software for easy programming

#### The IT3820/2020 at a glance:

- 10 m RF operating radius
- Buffering of bar codes beyond operating range
- 2.4 GHz radio frequency with frequency hopping according to Bluetooth™ V1.2
- Robust, compact housing
- 3 years warranty

## Technical Data

Type	IT3820	IT2020
Product	Bar code hand-held scanner	Base and charging station
Light source	Visible red light ( $\lambda = 630 \text{ nm}$ )	
Ambient light compatibility	Max. 70,000 lux	
Scanning/decoding frequency	270 Hz	
Reading distance/resolution	25 to 910 mm/0.51 mm; 64 to 1,110 mm/1.4 mm	
Reading width	254 mm at 419 mm reading distance	
Minimum resolution	0.127 mm	
Code types	All popular bar codes	
Batch function	500 codes (UPC) with 12 digits	
Optical indicators	LED for Good-read, low battery power and RF communication status	LED for data transmission, system and battery power status
Acoustical indicators	Beeper for Good-read and RF communication status	Beeper for system status and RF communication status
RF and data interface	<ul style="list-style-type: none"> <li>- Bluetooth™ V1.2, class 2</li> <li>- 2.4 to 2.4835 GHz (ISM band)</li> <li>- Frequency hopping</li> <li>- Data transfer rate 720 kbp/s</li> <li>- 10 m RF operating radius</li> <li>- Batch function to expand operating radius</li> </ul>	<ul style="list-style-type: none"> <li>- Bluetooth™ V1.2, class 2</li> <li>- Keyboard wedge for PCs and terminals</li> <li>- Wand emulation</li> <li>- RS 232 (TTL-level), optional RS 232 TRUE via converter</li> <li>- USB</li> </ul>
Operating voltage	3.6 V DC (Lithium-ion battery pack)	4.5 to 12 V DC
Current consumption		At 9 V DC: 750 mA (max. charging)
Housing	Polycarbonate/UL 94V0	
Enclosure rating	IP 41	
EMC Test	EN 55022 Class B; EN 301 489-1, 17; EN 300 328-1, 2	
Mechanical shock	50 drops from 1.8 m to concrete	50 drops from 1.2 m to concrete
Vibration	Withstands 5 g peak from 22 up to 300 Hz	
MTBF	> 80,000 h (Ground-Benign acc. to MIL-HDBK-217F)	
Weight	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 to +50 °C / -40 to +60 °C	
Rel. humidity	0 to 95 %, non-condensing	
Exchangeable battery (Lithium-ion)	1,600 mAh capacity Max. 20,000 scans Max. 20 h (stand by) Max. 12 h (heavy usage) Max. 4 h charge time	

## Ordering Information

Order No.	Type	Description
6033971 <sup>*)</sup>	IT3820SR0C0B-0GB0E	Kit of IT3820, IT2020, power supply unit and EU power line, user documentation
6033972 <sup>*)</sup>	IT3820SR0C0B-0GC0E	Kit of IT3820, IT2020, power supply unit and UK power line, user documentation
6029311	IT3820SR0C0	Bar code hand-held scanner, Bluetooth™ V1.2, incl. Lithium-ion battery
6029312 <sup>*)</sup>	IT2020-5	Base and charging station for IT3820, Bluetooth™ V1.2, RS 232 TTL, wand emulation, keyboard wedge, USB
6029317		Lithium-ion battery pack (spare part)
6029319 <sup>*)</sup>	IT2020-CB	Charging station for IT3820 (without Bluetooth™ and communication interface)
6033887		Battery charging sleeve for external charging of Lithium-ion battery
On request	Additional products such as interface cables for connection to various terminals and keyboards or power supply units and other accessories	

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