

IT4800i/IT4820i 2D Code Hand-Held Scanner

Hand-Held Line



IT4800i – Industrial identification of 2D codes with Adaptus™ Imaging Technology

The IT4800i is setting a new standard in industrial 2D Code identification.

The hand-held scanner IT4800i reliably identifies two-dimensional (2D) symbologies and even all popular linear bar codes and stacked bar codes (e.g. Data Matrix, PDF 417, Code 128, RSS limited & expanded). In addition this unit is also able to automatically capture OCR fonts, signatures and standard text. So the IT4800i combines both powerful code and text recognition in only one device.

The IT4800i 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. Aside from this the IT4800i is sealed against dust and water with an enclosure rating IP 54.

The IT4800i is also available as cordless version IT4820i. An integrated Bluetooth v1.2 module allows the cordless identification of codes within a 10 m radio range. Moreover codes which are scanned out of the radio range can be stored inside the scanner. These will be transmitted automatically to the base station when re-entering the radio range. This provides a high mobility to the user.

Another highlight is the possibility of fast, tool-free battery change. Moreover additional batteries can be charged separately. This increases the operational availability of the devices, particularly important in multiple shift operation.

Its optical and reading performance, ergonomic design, robustness, low temperature resistance and sealed housing leads to a world class and SUV performance in Imaging Technology. The IT4800i is an ideal choice for almost all industrial applications in material handling.

Your benefits:

- Fast and reliable identification of poor quality matrix codes and linear bar codes
- Bar/2D code and OCR-A/-B identification in one device
- Image acquisition optionally
- Omnidirectional scanning

The IT4800i at a glance:

- Reading distance up to 330 mm
- RS 232, PS/2 and USB interfaces
- IP 54 enclosure rating
- Robust, compact housing
- Ergonomic design
- Cordless version IT4820i
- Cold resistant operating up to -10 °C

Technical data

Type	IT4800i	IT4820i	IT2020
Scanner design	2-D Code hand-held scanner		Base and charging station
Light source	Visible red light ($\lambda = 630 \text{ nm}$), LED class I device		
Ambient light compatibility	Max. 100,000 lux		
Rotational sensitivity	Omnidirectional		
Versions	IT4800i SR Standard Range 2D Imager IT4800i SF Smart Focus 2D Imager	IT4820i SR IT4820i SF	
Reading distance/resolution	76 to 180 mm/0.21 mm with linear bar code (SR Version) 46 to 246 mm/0.38 mm with Data Matrix code (SR Version)		
Reading width	110 x 170 mm ² at 228 mm reading distance		
Min. resolution	0.19 mm with linear bar code (SF Version) 0.25 mm with Data Matrix code (SF Version)		
Code types	<ul style="list-style-type: none"> - Matrix codes: Maxicode, Data Matrix, 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 - RSS 14, RSS limited, RSS expanded 		
Optical indicators	1 x LED for Good Read	1 x LED for Good Read, low battery power and RF communication status	2 x LEDs für data transmission, system and battery power status
Acoustical indicators	Beeper for Good Read	Beeper for Good Read/RF communication status	Beeper for state of readiness/RF communication status
Data interface	<ul style="list-style-type: none"> - IT4800i: PS/2, USB, RS 232 TTL + True - IT4820i/IT2020: PS/2, USB, RS 232 TTL, optional RS 232 True via converter 		
Operating voltage	4.5 to 14 V DC	3.6 V DC (Li-Ion battery pack)	4.5 to 9 V DC (max. 12 V DC via host port)
Current consumption	<ul style="list-style-type: none"> - At 5 V DC: 375 mA (Standby 46 mA) - At 12 V DC: 165 mA (Standby 37 mA, Switch-on 225 mA) 		at DC 9 V: max. 750 mA (when charging)
Housing	Polycarbonate/UL 94V0		
Enclosure rating	IP 54		IP 41
EMC test	EN 55022 Class B, EN 55024:1998, EN 61000-3-2, EN 61000-3-3, EN 60950		
Mechanical shock	50 drops from 2 m to concrete		50 drops from 1.2 m
Vibration	Withstands 5 g peak from 22 up to 300 Hz		
MTBF	> 82,000 h (Ground-Benign acc. to MIL-HDBK-217F)		
Weight	Approx. 213 g (without cable)	Approx. 272 g (incl. battery pack)	Approx. 205 g (without cable)
Dimensions	163 mm x 135 mm x 81 mm		75 mm x 142 mm x 109 mm
Ambient temperature (operating/storage)	-10 °C to +50 °C/-40 °C to +60 °C		0 °C to +50 °C/ -40 °C to +60 °C
Rel. Humidity	0 to 95 %, non-condensing		

Order No.	Product
6028682 ^{*)}	IT4800ISR031CE, RS 232, True
6028683 ^{*)}	IT4800ISR051CE, RS 232, TTL, wand emulation, keyboard wedge, USB
6028634 ^{*)}	IT4800ISF031CE, RS 232, True
6028635 ^{*)}	IT4800ISF051CE, RS 232, TTL, wand emulation, keyboard wedge, USB
6034076	IT4820ISR USB Kit EU, incl. SR 2D Imager, base station, USB cable, power supply unit and manual
6034078	IT4820ISF USB Kit EU, incl. SF 2D Imager, base station, USB cable, power supply unit and manual
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 a power supply unit are additionally required.