4820i

Industrial Cordless 2D Imager

The 4820i Industrial Cordless 2D Imager is designed to provide unmatched data collection performance and versatility for applications that demand maximum reliability in the harshest working environments.

Powered by Adaptus® Imaging Technology 5.0, the 4820i delivers high-performance, omni-directional linear and 2D barcode reading plus the versatility of digital image capture. With Adaptus 5.0, enterprises have the ability to capture and process more data with a single device.

Built for scan-intensive applications requiring a ruggedized solution, the 4820i features our highest drop specification and an IP54 rating to guarantee protection against the penetration of dust and liquid. However, unlike other industrial grade solutions, the 4820i features best-in-class ergonomics – ensuring maximum user comfort and productivity.

The 4820i features a unique design that not only allows tool-free access to the battery, but also eliminates the need to dock the scanner for charging – a true advantage for operations where downtime is not an option.

Bluetooth® cordless connectivity allows users to move freely and eliminates the hazard of cables in fast-paced environments – all the while ensuring fast, accurate data communication.

powered by
Adaptus®
imaging technology 5.0

Features

- **Built for Industrial Applications:** Rugged housing is specified to withstand 50 drops from 6.5 feet (2m) and certified to IP54 standards, while still being ergonomic and easy-to-use.

- **Wireless Connectivity:** Bluetooth v1.2 radio enables movement up to 33 feet (10m) from the base, and reduces interference with other wireless systems. Up to 7 imagers can communicate to 1 base, reducing the total cost of ownership.

- **High Performance and Versatile Data Collection:** Adaptus Imaging Technology 5.0 provides aggressive, omni-directional reading of all linear and 2D barcodes, plus enables digital image capture.

- **Advanced Illumination Technology:** Enhances performance and ease of use by delivering snappier scanning and minimizing reflection from shiny items.

- **Long-Lasting Lithium-Ion Battery with Tool-Free Access:** Powers up to 50,000 scans per full charge ensuring maximum uptime. Thumbwheel end-cap allows easy access to the battery, permitting employees to quickly swap batteries and keep working instead of docking the scanner

for charging – a key feature for operations running multiple shifts.

- **Simplified Device Configuration:** Visual Xpress™ software enables device programming and configuration on a host system through an easy-to-use Windows®-based graphical user interface.

- **User Feedback Designed for Extreme Environments:** Adjustable, extra loud "good read" beeper and dual LED indicators ensure reliable & intuitive feedback even in noisy environments.

Specialization Options

- **FIPS 140-2 Certified Encryption:** Federal Information Processing Standards (FIPS) certified for wireless data transmission, meeting advanced US Government security requirements, and providing enhanced security in any application involving sensitive data.

- **Bluetooth Interface Module Option:** Enables simple and reliable wireless connectivity to the host system without the need for a base – ideal for uses where space is limited.

4820i Specifications

Performance

Illumination LEDs:	617nm +30nm					
Green LED Aimer:	526nm +30nm					
Image:	VGA, 752x480. Binary, TIFF, or JPEG output.					

Working Range:

4820iSR	**8.3 mil Linear (.021cm)**	**13 mil UPC (.033cm)**	**6.6 mil PDF417 (.017cm)**	**10 mil PDF417 (.025cm)**	**15 mil Data Matrix (.038cm)**	**35 mil MaxiCode (.089cm)**
Near	3.0 in. (7.6cm)	1.6 in. (4.1cm)	4.0 in. (10.2cm)	2.6 in. (6.6cm)	1.8 in. (4.6cm)	1.5 in. (3.8cm)
Far	7.1 in. (18.0cm)	12.7 in. (32.3cm)	5.7 in. (14.5cm)	8.5 in. (21.6cm)	9.7 in. (24.6cm)	12.5 in. (31.8cm)
4820iSF	**7.5 mil Linear (.019cm)**	**13 mil UPC (.033cm)**	**6.6 mil PDF417 (.017cm)**	**10 mil PDF417 (.025cm)**	**15 mil Data Matrix (.038cm)**	**15 mil QR Code (.038cm)**
Near	2.0 in. (5.1cm)	1.5 in. (3.8cm)	2.3 in. (5.8cm)	2.2 in. (5.6cm)	1.8 in. (4.6cm)	2.2 in. (5.6cm)
Far	6.0 in. (15.2cm)	8.4 in. (21.3cm)	5.5 in. (14.0cm)	7.1 in. (18.0cm)	7.0 in. (17.8cm)	6.7 in. (17.0cm)

Pitch/Skew Angle:	±40°
Motion Tolerance:	Standard: 4 in. (10 cm) per second Streaming Presentation™ Mode SF: 20 in. (50 cm) per second on 100% UPC/EAN at the plane of optimum focus

Wireless Technology

Frequency:	2.4 to 2.4835 GHz (ISM Band) Frequency-Hopping Bluetooth v. 1.2
Range:	33 ft. (10 m) typical
Data Rates:	720 KBps
Security:	FIPS 140-2 (Certification Pending)

Battery (Lithium Ion)

Capacity:	1,800 mAh (minimum)
Number of Scans:	50,000
Expected Hours of Operation:	16 hours
Charge Time with 9 VDC External Power Supply:	4 hours for full charge from full discharge

Symbologies

2 Dimensional:	PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesas, Code 49, and EAN•UCC Composite
Linear:	Codabar, Code 39, Interleaved 2 of 5, Code 93, Code 128, UPC, EAN, GS1 DataBar, Codablock and ISBT 128 Concatenation* *requires a paid license
Postal:	Postnet, Planet Code, British Post, Canadian Post, Japanese Post, KIX (Netherlands Post)
OCR Fonts:	OCR-A, OCR-B
Interfaces:	Keyboard wedge, USB, TTL level RS-232, wand emulation, TTL level Serial Wedge, and IBM 46XX retail terminals

Mechanical/Electrical

	4820i Scanner	**2020 Base**
Dimensions		
Weight:	9.6 oz. (272 g)	8.8 oz. (250 g) w/o cable
Height:	6.2 in. (15.7cm)	3.1 in. (7.9cm)
Power Requirements		
Input Voltage:	3.7 V internal battery	4.7 to 14 VDC (host) 8.5 to 9.5 VDC external power supply
Current Draw:	- - - - - - - -	125mA max @ 5 V (no charging) 100 mA max @ 12 V (no charging) 825mA max @ 12 V (charging)

Environmental

	4820i Scanner	**2020 Base**
Sealing:	IP54	
Operating Temperature:	14° to 122°F (-10° to 50°C)	32° to 122°F (0° to 50°C)
Storage Temperature:	-40° to 158°F (-40° to 70°C)	-40° to 140°F (-40° to 60°C)
Humidity:	0 to 95%, non condensing	up to 95%, non condensing
Mechanical Shock:	Functional after 50 drops from 6.5 ft. (2.0m)	Functional after 50 drops from 3.3 ft. (1m)
Agency:	**International:** CB scheme to IEC60950-1 & IEC60825-1 Class 1 LED (4820i). Bluetooth Qualified Design listed. **USA:** FCC Part 15 subpart C. UL listed to 60950-1. **Canada:** RSS-210. cUL listed to CSA C22.2 No. 60950-1-03. **Europe:** CE 1999/5/EC R&TTE Directive to EN55022, EN55024, EN61000-3-2, EN61000-3-3. 2006/95/EC Low Voltage Directive (2020). **GS Mark:** GS marked for I.T.E. safety. **Mexico:** NOM-NYCE, COFETEL. **Australia/NZ:** C-Tick mark.	
Warranty:	3 years (Note: battery warranty is 1 year)	

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