

4820i

Industrial Cordless 2D Imager



powered by
Adaptus[®]
imaging technology 5.0

Overview

From the global leader in handheld imaging solutions, 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 bar code reading plus the versatility of digital image capture. With Adaptus 5.0, enterprises have the ability to capture and process more data than ever before 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.

Premium Features

- **High Performance and Versatile Data Collection:** Adaptus Imaging Technology 5.0 provides aggressive, omni-directional reading of all linear and 2D bar codes, plus enables digital image capture.
- **Tool-Free Battery Access:** 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 Through Advanced Software Assets:** Visual Xpress™ software enables device programming and configuration on a host system through an easy-to-use Windows®-based graphical user interface.
- **Leading Combination of Ergonomics and Durability:** 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.
- **Presentation Scanning Capability:** Can be programmed to scan in presentation mode while docked in the base, enabling hands-free scanning.
- **FIPS 140-2 Certification Pending:** In-process for Federal Information Processing Standards (FIPS) certification for wireless data transmission, required by US Government Departments and recommended in private sector and non-US Government applications for sensitive data security.

Industry Standard Features

- **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.
- **User Feedback Designed for Extreme Environments:** Adjustable, extra loud “good read” beeper and dual LED indicators ensure reliable & intuitive feedback even in noisy environments.
- **Long-Lasting Lithium-Ion Battery:** Powers up to 50,000 scans per full charge ensuring maximum uptime.

4820i Specifications

Performance

Illumination LEDs:	626nm +30nm
Green LED Aimer:	526nm +30nm
Image:	VGA, 752x480. Binary, TIFF, or JPEG output.

Working Range:

	SR	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)
	SF	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:	4 in. (10 cm) per second

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	IP41 (Water and Dust Resistant)
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:	FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV, 2005 Sunrise Compliant	
Warranty:	3 years (Note: battery warranty is 1 year)	



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Worldwide Offices

NORTH AMERICA

Skaneateles Falls, NY
Tel: +1 315 685 8945
or, in North America:
+1 800 582 4263
napresales@handheld.com

Carolinas

Tel: +1 803 835 8000
or, in North America:
+1 800 582 4263
napresales@handheld.com

ASIA AND THE PACIFIC RIM

Hong Kong
Tel: +852 2511 3050
appresales@handheld.com

Japan

Tel: +813 5770 6312
appresales@handheld.com

Shanghai

Tel: +86 21 6361 3818
appresales@handheld.com

Malaysia

Tel: +603-6201 9020
appresales@handheld.com

LATIN AMERICA

Naples, Florida
Tel: +1 239 263 7600
lapresales@handheld.com

Rio De Janeiro

Tel: +55 21 2178 0500
lapresales@handheld.com

Mexico

Tel: +52 55 5203 2100
lapresales@handheld.com

EUROPE, MIDDLE EAST, AND AFRICA

Europe
Tel: +31 (0) 40 29 01 600
eusales@handheld.com

United Kingdom

Tel: +44 (0) 1 925 240055
eusales@handheld.com

Italy

Tel: +39 02 7254 6754
Info.italy@handheld.com

France

Tel: +33 (0) 1 41 158220
Info.france@handheld.com

Germany

Tel: +49 (0) 7 477 151377
Info.germany@handheld.com

Spain

Tel: +34 93 228 78 68
Info.spain@handheld.com



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