4820 ⓘ

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.

The 4820i Advantage

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.*

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.*

Performance

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

4820i SR	8.3 mil Linear (.021cm)	13 mil UPC (.033cm)	6.6 mil PDF417 (.017cm)	10 mil PDF417 (.025cm)	15 mil PDF417 (.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)

4820i 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)	1.7 in. (4.3cm)	1.3 in. (3.3cm)	1.7 in. (4.3 cm)
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

Radio

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

Battery

Lithium Ion

Capacity:	2,200 mAh
Number of Scans:	50,000
Expected Hours of Operation:	16 hours
Charge Time at 9 Vac:	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, RSS and Codablock
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. (15.7 cm)	3.1 in. (7.9 cm)
Power Requirements		
Input Voltage:	4.2 V internal battery	4.5 to 12 VDC (host) 8.5 to 9.5 VDC brick
Current Draw		125mA max @ 5V (no charging) 100 mA max @ 12V (no charging) 825mA max @ 12V (charging)

Environmental

	4820i Scanner	2020 Base
Sealing:	IP 54	IP 41
Temperature		
Operating:	14° to 122°F (-10° to 50°C)	32° to 122°F (0° to 50°C)
Storage:	-40° to 158°F (-40° to 70°C)	-40° to 158°F (-40° to 70°C)
Humidity:	0 to 95%, non condensing	up to 95%, non condensing
Mechanical Shock:	Functional after 50 drops from 6.5 ft. (2.0 m)	Functional after 50 drops from 3.3 ft. (1 m)

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