

# 4820

## Cordless 2D Imager



### Overview

The 4820 combines exclusive Adaptus™ Imaging Technology 5.0 with Bluetooth® wireless connectivity to provide a sleek, rugged cordless area imager for retail and commercial bar code reading.

The 4820 was purpose-optimized to help your enterprise improve productivity. In applications where operators must move about to read bar codes, cables become a limiting factor. These cumbersome cables lead to safety and ergonomic concerns, resulting in costly operational inefficiencies. With cordless bar code reading, users have the freedom of movement required to quickly, safely, and comfortably read bar code data within a 33 foot (10m) range.

Bar code reading is a mission-critical operation, which is why the 4820 cordless area imager was designed with an intensive focus on durability and reliability. With no moving parts and a robust housing, the 4820 will be available when needed, providing years of dependable service.

With our proven commitment to imaging innovation, we know what it takes to build world-class data capture solutions. Hand Held Products has over 15 years of experience developing, testing and deploying area imagers.

### Features

- **Bluetooth® v1.2 Class 2 Radio reduces interference in existing RF backbones, including 802.11. Only v1.2 uses Adaptive Frequency Hopping (AFH) to mitigate data collisions in the 2.4GHz frequency band, while providing a 33 foot (10m) working range.**
- **Smallest footprint in class, simplifying installation and conserving valuable counter space.**
- **Optional presentation scanning while the imager is in its base for efficient, hands-free data capture.**
- **Host-powered interface and RF link – an exclusive Hand Held Products feature that extends the mobile capabilities of the 4820 by drawing power from a portable device for radio and host communications.**
- **Long lasting, field replaceable, high capacity lithium ion battery provides up to 50,000 scans per full charge with no conditioning required.**
- **Solid state, no-moving-parts design withstands over 50 drops to concrete from 6 feet (1.8m).**

# 4820 Specifications

## Performance

<b>Illumination LEDs:</b>	626nm ±30nm
<b>Aiming (Green LED Aimer):</b>	526nm ±30nm
<b>Image:</b>	VGA, 752x480. Binary, TIFF, or JPEG output.

## Working Range:

	4820 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)
<b>Near</b>		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)
<b>Far</b>		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)
	4820SF	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)
<b>Near</b>		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)
<b>Far</b>		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)

<b>Pitch/Skew Angle:</b>	±40°
<b>Motion Tolerance:</b>	4 in. (10 cm) per second

## Radio

<b>Frequency:</b>	2.4 to 2.4835 GHz (ISM Band) Frequency-Hopping Bluetooth v. 1.2
<b>Range:</b>	33 ft. (10 m) typical 
<b>Data Rates:</b>	720 KBps

## Battery (Lithium Ion)

<b>Capacity:</b>	1,800 mAh
<b>Number of Scans:</b>	50,000
<b>Expected Hours of Operation:</b>	16 hours
<b>Charge Time at 9 Vac:</b>	4 hours for full charge from full discharge

## Symbologies

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

## Mechanical/Electrical

	4820 Scanner	2020 Base
<b>Weight:</b>	9 oz. (255 g)	8.8 oz. (250 g) w/o cable
<b>Height:</b>	6.5 in. (16.5 cm)	3.1 in. (7.9 cm)
<b>Input Voltage:</b>	4.2 V internal battery	4.0 to 14 VDC (host) 8.5 to 9.5 VDC (brick)
<b>Current Draw:</b>		125mA max @ 5V (no charging) 100 mA max @ 12V (no charging) 825mA max @ 12V (charging)

## Environmental

	4820 Scanner	2020 Base
<b>Sealing:</b>	IP 41 (Water and Dust Resistant)	IP 41 (Water and Dust Resistant)
<b>Operating Temperature:</b>	32° to 122°F (0° to 50°C)	32° to 122°F (0° to 50°C)
<b>Storage Temperature:</b>	-40° to 140°F (-40° to 60°C)	-40° to 158°F (-40° to 70°C)
<b>Humidity:</b>	0 to 95%, non condensing	up to 95%, non condensing
<b>Mechanical Shock:</b>	Functional after 50 drops from 6 ft.	Functional after 50 drops from 3.3 ft. (1 m)
<b>Agency:</b>	FCC Class B, CE EMC Class B, CE Low Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV, 2005 Sunrise Compliant	

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