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.

**Overview**

**Features**

- **Bluetooth® v1.2 Class 2 Radio:** Developed to reduce 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.

- **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.

- **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

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

Working Range:

<table>
<thead>
<tr>
<th>4820 SR</th>
<th>8.3 mil Linear (0.021cm)</th>
<th>13 mil UPC (0.033cm)</th>
<th>6.6 mil PDF417 (0.017cm)</th>
<th>10 mil PDF417 (0.025cm)</th>
<th>15 mil PDF417 (0.038cm)</th>
<th>35 mil MaxiCode (0.089cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near</td>
<td>3.0 in. (7.6cm)</td>
<td>1.6 in. (4.1cm)</td>
<td>4.0 in. (10.2cm)</td>
<td>2.6 in. (6.6cm)</td>
<td>1.8 in. (4.6cm)</td>
<td>1.5 in. (3.8cm)</td>
</tr>
<tr>
<td>Far</td>
<td>7.1 in. (18.0cm)</td>
<td>12.7 in. (32.3cm)</td>
<td>5.7 in. (14.5cm)</td>
<td>8.5 in. (21.6cm)</td>
<td>9.7 in. (24.6cm)</td>
<td>12.5 in. (31.8cm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4820SF</th>
<th>7.5 mil Linear (0.019cm)</th>
<th>13 mil UPC (0.033cm)</th>
<th>6.6 mil PDF417 (0.017cm)</th>
<th>10 mil PDF417 (0.025cm)</th>
<th>15 mil Data Matrix (0.038cm)</th>
<th>15 mil QR Code (0.038cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near</td>
<td>2.0 in. (5.1cm)</td>
<td>1.5 in. (3.8cm)</td>
<td>2.3 in. (5.8cm)</td>
<td>1.7 in. (4.3cm)</td>
<td>1.3 in. (3.3cm)</td>
<td>1.7 in. (4.3cm)</td>
</tr>
<tr>
<td>Far</td>
<td>6.0 in. (15.2cm)</td>
<td>8.4 in. (21.3cm)</td>
<td>5.5 in. (14.0cm)</td>
<td>7.1 in. (18.0cm)</td>
<td>7.0 in. (17.8cm)</td>
<td>6.7 in. (17.0cm)</td>
</tr>
</tbody>
</table>

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
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: 4 hours for full charge from full discharge
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, RSS, 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

4820 Scanner  2020 Base
Weight: 9 oz. (255 g) 8.8 oz. (250 g) w/o cable
Height: 6.5 in. (16.5 cm) 3.1 in. (7.9 cm)
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 @ 5V (no charging) 160 mA max @ 12V (no charging) 825mA max @ 12V (charging)

Environmental

4820 Scanner  2020 Base
Sealing: IP 41 (Water and Dust Resistant)
Operating Temperature: 32° to 122°F (0° to 50°C) 32° to 122°F (0° to 50°C)
Storage Temperature: -40° to 140°F (-40° to 60°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 ft. (1.8 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, TUV, 2005 Sunrise Compliant
Warranty: 3 years (Note: battery warranty is 1 year)

BLUETOOTH is a trademark owned by Bluetooth SIG, Inc., U.S.A. and licensed to Hand Held Products.

Worldwide Offices

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

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

EUROPE, MIDDLE EAST, AND AFRICA
Europe
Tel: +31 (0) 40 29 01 600
eusales@handheld.com

United Kingdom
Tel: +44 (0) 1 293 63 050
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

Hand Held Products, Inc. (“Hand Held Products”)® 1989-2007. All rights reserved. Printed in the U.S.A. Web Site Address: www.handheld.com
Due to Hand Held Products’ continuing product improvement programs, specifications and features herein are subject to change without notice.