3820
Retail/Commercial Cordless Scanning System

Hand Held Products 3820 combines exclusive Adaptus Imaging Technology with Bluetooth wireless connectivity to provide class-leading performance and durability for retail and commercial cordless bar code reading.

In applications where operators must move about to read bar codes, cables become a limiting factor. They cause inefficiencies or safety and ergonomic concerns. Cable length often limits working range, resulting in an object being moved to the reader because the reader can’t be taken to the object. With cordless bar code reading, operators have freedom of movement required to quickly, safely, and ergonomically read bar code data. With a 33 foot (10m) working range and 24 inch (61cm) read-range, the 3820 has the right combination of performance and features.

Having the right performance is only part of the solution; staying in service is just as important. The 3820 also has class-leading durability. It was designed to survive in real world mobile applications. Hand Held Products is committed to creating some of the most rugged products available, and the 3820 is another example of that commitment. With no moving parts and a robust housing design, the 3820 will easily provide years of service in retail and commercial environments, creating a favorable total cost of ownership.

For information on how the 3820 can make your business more efficient, contact us at any of the locations listed on the back or visit us at www.handheld.com.

2005 Sunrise Compliant!

Features

Adaptus™ Imaging Technology - Hand Held Products exclusive brand of imaging technology provides best-in-class read range and an unsurpassed ability to read poor quality bar codes. Both features are well suited to cordless applications where improved efficiency and ergonomics are primary goals.

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 2.4 GHz frequency band, while providing a 33 foot (10m) working range.

Unique Base Design offers the following features:

- A minimal footprint that is up to 33% smaller than major competitors’, simplifying installation and leaving more counter space for customer service or other application needs.
- Presentation scanning with a docked imager for efficient, hands-free bar code reading.
- Host-powered interface and RF link; an exclusive Hand Held Products feature that extends the mobile capabilities of the 3820 by drawing power from a portable device for radio and host communications.

Battery - A long lasting, high capacity lithium ion battery provides 57,000 scans per full charge with no conditioning required. The battery is field-replaceable.

Durable - Hand Held Products solid state, no-moving-parts imager design withstands more than fifty 6 foot (1.8m) drops to concrete.
### Performance

**Illumination:** 630 NM Visible Red LED  
**Receiving Device:** 3648 element linear imager  
**Reading Distance:** From 1 in. (2.5 cm) to 24 in. (61 cm) on medium density codes  
**Reading Width:** 7.5 mil code: 7 in. (18 cm) from nose, 6.6 in. (17 cm) wide  
13 mil code: 16.5 in. (42 cm) from nose, 10 in. (25 cm) wide  
**Resolution:** 5 mil. at 5 in. (13 cm) distance  
**Skew Angle:** ±65°  
**Pitch Angle:** ±65°  
**Minimum Symbol Contrast:** 20%  
**Scan Rate:** Up to 270 scans per second  
**Decode Rate:** 270 decodes per second

### Mechanical/Electrical

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>3820 Scanner with Battery</th>
<th>2020 Base</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight:</strong></td>
<td>9.2 oz. (261 g)</td>
<td>8.8 oz. (250 g) w/o cable</td>
</tr>
<tr>
<td><strong>Height:</strong></td>
<td>6.5 in. (16.5 cm)</td>
<td>3.1 in. (7.9 cm)</td>
</tr>
<tr>
<td><strong>Power Requirements:</strong></td>
<td>3.6 V internal battery</td>
<td>4.5 to 12 VDC (host)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.5 to 9.5 VDC brick</td>
</tr>
<tr>
<td><strong>Current Draw:</strong></td>
<td></td>
<td>125 mA max @ 5V (no charging)</td>
</tr>
<tr>
<td><strong>Operating:</strong></td>
<td>N/A</td>
<td>100 mA max @ 12V (no charging)</td>
</tr>
<tr>
<td><strong>Standby:</strong></td>
<td>N/A</td>
<td>825 mA max @ 12V (charging)</td>
</tr>
</tbody>
</table>

#### Environmental

| Sealing: | IP 41 (Water and Dust Resistant) | IP 41 (Water and Dust Resistant) |
| Temperature Operating: | 32° to 122°F (0° to 50°C) | 32° to 122°F (0° to 50°C) |
| Storage: | -40° to 140°F (-40° to 60°C) | -40° to 140°F (-40° to 60°C) |
| Humidity: | up 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) |

**Ambient Illumination:** 0-76,000 lux  
**ESD Protection:** Functional after 15 kV discharge

#### 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

**Capacity:** 2,000 mAh  
**Number of Scans:** 57,000  
**Expected Hours of Operation:** 16 hours @ 1 scan every second  
**Charge Time with 9 VDC brick:** 4 hours for full charge from full discharge


**Interfaces:** All popular PCs and terminals via keyboard wedge, keyboard replacement/direct connect, USB, TTL level RS-232, wand emulation mode, TTL level Serial Wedge, and IBM 46XX retail terminals.

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