

3820

Cordless Linear Imager



Overview

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.

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.
- **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.
- **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.

3820 Specifications

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

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:	57,000
Expected Hours of Operation:	16 hours
Charge Time with 9 VDC External Power Supply:	4 hours for full charge from full discharge

Symbologies: China Post, Codabar, Codablock F, Code 2 of 5, Code 11, Code 16K, Code 39, Code 32 Pharmaceutical (PARAF), Code 49, Code 128, EAN/JAN, IATA Code 2 of 5, Interleaved 2 of 5, Korea Post, Matrix 2 of 5, Coupon Code, MSI, Plessey Code, PosiCode, GS1 DataBar, Telepen, Trioptic, UPC-A, UPC-E, and ISBT 128 Concatenation (requires a paid license). 2005 Sunrise/GTIN compliant.

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.

Mechanical/Electrical

	3820 Scanner with Battery	2020 Base
Dimensions		
Weight:	9.2 oz. (261 g)	8.8 oz. (250 g) w/o cable
Height:	6.5 in. (16.5 cm)	3.1 in. (7.9 cm)
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		125 mA max @ 5V (no charging) 100 mA max @ 12V (no charging) 825 mA max @ 12V (charging)

Environmental

	3820 Scanner with Battery	2020 Base
Sealing:	IP 41 (Water and Dust Resistant)	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:	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	



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



Hand Held Products, Inc., ("Hand Held Products")® 1999-2007. 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.