

3820

Wireless Linear-Imaging Scanner

The 3820 combines exclusive Adaptus® Imaging Technology 5.0 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 wireless 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. Honeywell 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

- **Superior Read Range:** Imaging technology now extends the read range out to 24" (610 mm) on the bar codes used in retail applications
- **Fast and Aggressive Decode:** Even on poorly printed or damaged codes, the 270 scans per second scan rate and software digitizer quickly processes the data and transmits it to your application
- **Wireless Connectivity:** Bluetooth v2.0 radio enables movement up to 33 feet (10 m) 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
- **Battery:** A long lasting, field-replaceable, high capacity lithium ion battery provides up to 57,000 scans per full charge with no conditioning required
- **Optional FIPS 140-2 Certified Encryption:** Federal Information Processing Standards (FIPS) certified for wireless data transmission, meeting advanced US Government security requirements, and providing enhanced security in any application involving sensitive data
- **Durable:** Honeywell's solid state, no-moving-parts imager design withstands more than fifty 6 foot (1.8m) drops to concrete
- **Unique Base Design offers the following features:**
 - A minimal footprint that is 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 Honeywell feature that extends the mobile capabilities of the 3820 by drawing power from a portable device for radio and host communications

3820 Technical Specifications

Operational

Light Source	Visible Red LED 630 nm
Visual Indicators	Green = good read
Host System Interfaces	USB, TTL level RS232, Keyboard Wedge, IBM 46xx (RS485), Light Pen (Wand) Emulation

Wireless

Radio/Range	2.4 to 2.5 GHz (ISM Band) Frequency - Hopping Bluetooth v2.0; Class 2: 10 m (33') line of sight
Data Range (Transmission Rate)	3 Mbit/s (2.1 Mbit/s)
Battery	1800 mAh Li-ion
Number of Scans	up to 57,000 scans per charge
Expected Hours of Operation	16 hours
Expected Charge Time	4 hours

Mechanical/Electrical

	Scanner	Cradle
Dimensions (LxWxH)	165 mm x 81 mm x 157 mm (6.5" x 3.2" x 6.2")	140 mm x 110 mm x 81 mm (5.5" x 4.3" x 3.2")
Weight	261 g (9.2 oz)	250 g (8.8 oz)
Charging Power		9.9 W (825 mA @ 12 V)
Non-Charging Power		625 mW (125 mA @ 5 V); 1.2 W (100 mA @ 12 V)
DC Transformers	3.7 V Internal Battery	4.5 - 12 VDC
LED Class	Class 1: IEC60825-1, EN60825-1	
EMC	FCC Part 15, ICES-003, EN55022 Class B	

Environmental

Operating Temperature	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
Humidity	0% to 95% relative humidity, non-condensing	0% to 95% relative humidity, non-condensing
Drop	Designed to withstand 1.8 m (6') drops	Designed to withstand 1.0 m (3.3') drops
Environmental Sealing	IP41	Sealed to resist airborne particulate contaminants
Light Levels	70,000 Lux	

Scan Performance

Scan Pattern	Linear Image (3648 pixels)
Scan Speed	270 scans per second
Motion Tolerance	5 cm/s (2 in/s) with 13 mil UPC at optimal focus
Scan Angle	Horizontal: 47°
Print Contrast	20% minimum reflectance difference
Pitch, Skew	65°, 65°
Decode Capabilities	Reads standard 1D and GS1 Databar symbologies. Visit www.honeywell.com/aidc/symbologies for details.



Typical Performance*	
Narrow Width	Depth of Field
7.5 mil	102 mm - 356 mm (4.0" - 14")
10 mil	51 mm - 457 mm (2.0" - 18")
13 mil	25 mm - 610 mm (1.0" - 24")
20 mil	25 mm - 914 mm (1.0" - 36")
*Resolution: 5 mil (0.127 mm)	
*Performance may be impacted by bar code quality and environmental conditions	

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