

# 4820

## Wireless Area-Imaging Scanner

The 4820 wireless area-imager is designed to provide the unmatched data collection versatility of 2D imaging for a wide variety of light-industrial applications, with the convenience and freedom of Bluetooth® wireless connectivity.

Powered by Adaptus® Imaging Technology 5.0, the 4820 delivers high-performance omnidirectional linear, stacked and 2D bar code reading, plus the versatility of digital image capture capability. With Adaptus 5.0, enterprises have the ability to capture and process more data than ever before with a single device.

Designed for scan-intensive applications that require freedom of movement for the operator, the 4820 enables use up to 33' (10 m) away from the base, and eliminates the hazards or hassles that can be presented by cables in fast-paced environments.

Built to ensure longevity and reliability in light-industrial applications, the 4820 features a solid-state design and a 6' (1.8 m) drop specification, backed by a 3-year warranty—all without sacrificing comfortable user ergonomics.



## Features

- **Built for Light Industrial Applications:** Solid state, no-moving-parts design withstands over 50 drops to concrete from 6' (1.8 m), while still being ergonomic and easy to use
- **High Performance and Versatile Data Collection:** Adaptus Imaging Technology 5.0 provides aggressive, omnidirectional reading of all linear and 2D bar codes, plus enables digital image capture
- **Wireless Connectivity:** Bluetooth v2.0 radio enables movement up to 33' (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.
- **Advanced Illumination Technology:** Enhances performance and ease of use by delivering snappier scanning and minimizing reflection from shiny items
- **Long-Lasting Lithium-Ion Battery:** Powers up to 50,000 scans per full charge ensuring maximum uptime
- **Simplified Device Configuration:** Visual Xpress™ software enables device programming and configuration on a host system through an easy-to-use Windows®-based graphical user interface.
- **Specialization Options**
  - **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
  - **Bluetooth Interface Module Option:** Enables simple and reliable wireless connectivity to the host system without the need for a base—ideal for uses where space is limited
  - **Disinfectant-Ready Housing:** Optimal for environments where scanner must be cleaned frequently with harsh chemicals.

# 4820 Technical Specifications

## Wireless

Radio/Range	2.4 to 2.5 GHz (ISM Band) Adaptive Frequency - Hopping Bluetooth v2.0; Class 2: 10 m (33') line of sight
Data Rate (Transmission Rate)	3 Mbit/s (2.1 Mbit/s)
Battery	1,800 mAh Li-ion (minimum)
Number of Scans	50,000 scans
Expected Hours of Operation	16 hours
Expected Charge Time	4 hours

## Mechanical/Electrical

	Scanner	Base
Dimensions (LxWxH)	135 mm x 81 mm x 163 mm (5.3" x 3.2" x 6.4")	
Weight	255 g (9 oz)	250 g (8.8 oz)
Operating Power (Charging)	N/A	9.9 W (825 mA @ 12 V)
Non-Charging Power	N/A	625 mW (125 mA @ 5 V); 1.2 W (100 mA @ 12 V)
Host System Interfaces	USB, TTL level RS232, Keyboard Wedge, IBM 46xx (RS485), Light Pen (Wand) Emulation	

## 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 m (3.3') drops
Environmental Sealing	IP41	Sealed to resist airborne particulate contaminants
Light Levels	100,000 Lux	

## Scan Performance

Scan Pattern	Area Image (752 x 480 pixel array)
Motion Tolerance	Standard: 10 cm/s (4 in/s); Streaming Presentation: 50 cm/s (20 in/s) with 13 mil UPC at optimal focus
Scan Angle	Horizontal: 42°; Vertical: 27°
Print Contrast	20% minimum reflectance difference
Pitch, Skew	40°, 40°
Decode Capabilities	Reads standard 1D, stacked, 2D and postal symbologies; limited OCR font reading
Warranty	3 year factory warranty (Note: battery warranty is 1 year)

For a complete listing of all compliance approvals and certifications, please visit [www.honeywellaidc.com/compliance](http://www.honeywellaidc.com/compliance)  
 For a complete listing of all supported bar code symbologies, please visit [www.honeywellaidc.com/symbologies](http://www.honeywellaidc.com/symbologies)

Typical Performance* (HD)		Typical Performance* (SR)		Typical Performance* (SF)	
Narrow Width	Depth of Field	Narrow Width	Depth of Field	Narrow Width	Depth of Field
5 mil	48 mm - 97 mm (1.9" - 3.8")	8.3 mil	76 mm - 180 mm (3.0" - 7.1")	5 mil	79 mm - 94 mm (3.1" - 3.7")
13 mil UPC	41 mm - 157 mm (1.6" - 6.2")	13 mil UPC	41 mm - 323 mm (1.6" - 12.7")	13 mil UPC	38 mm - 213 mm (1.5" - 8.4")
6.6 mil PDF	41 mm - 114 mm (1.6" - 4.5")	6.6 mil PDF	102 mm - 145 mm (4.0" - 5.7")	6.6 mil PDF	58 mm - 140 mm (2.3" - 5.5")
6.7 mil DM	61 mm - 89 mm (2.4" - 3.5")	15 mil PDF	46 mm - 246 mm (1.8" - 9.7")	15 mil DM	33 mm - 178 mm (1.3" - 7.0")
6.7 mil QR	58 mm - 86 mm (2.3" - 3.4")	35 mil MC	38 mm - 318 mm (1.5" - 12.5")	15 mil QR	43 mm - 170 mm (1.7" - 6.7")
*Resolution: 5 mil (0.127 mm) *Performance may be impacted by bar code quality and environmental conditions		*Resolution: 8.3 mil (0.211 mm) *Performance may be impacted by bar code quality and environmental conditions		*Resolution: 5 mil (0.127 mm) *Performance may be impacted by bar code quality and environmental conditions	



### For more information:

[www.honeywellaidc.com](http://www.honeywellaidc.com)

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