

# Xenon 1902

## Wireless Area-Imaging Scanner

Xenon 1902, Honeywell's sixth-generation of area-imaging technology, is redefining the standard for hand-held scanners. Featuring a custom sensor that is optimized for bar code scanning, Xenon 1902 offers industry-leading performance and reliability for a wide variety of applications that require the versatility of area-imaging technology plus the freedom of Bluetooth® wireless connectivity.

Powered by Adaptus® Imaging Technology 6.0, Xenon 1902 delivers superior bar code scanning and digital image capture. Xenon 1902 incorporates a revolutionary decoding architecture that combines Adaptus Imaging Technology 5.5 and Omniplanar's SwiftDecoder™ software along with a custom sensor, enabling extended depth of field, faster reading, and improved scanning performance on poor quality bar codes. From high density linear to 2D bar codes found directly on the screen of a mobile device, Xenon 1902 decodes virtually all bar codes with ease.

Xenon 1902 incorporates a Bluetooth Class 2, v2.1 radio, enabling unrestricted movement up to 33 feet (10m) from the base. Honeywell's Shift-PLUS™ power management system provides up to 14 hours of battery life, maximizing productivity. For added convenience, a paging system helps locate misplaced scanners.

A new space-saving design that mounts critical components on a single board eliminates the need for connectors. A more reliable design with fewer components minimizes downtime and improves serviceability, resulting in increased productivity. Its small form factor ensures that the Xenon 1902 fits well in nearly any sized hand, reducing fatigue.

Built with durability in mind, Xenon 1902 can withstand up to 50 drops to concrete from 6 feet. An IP41-rating provides added protection. With a solid-state design backed by a three-year warranty, Xenon 1902 is constructed to deliver years of uninterrupted performance.



## Features

- **Wireless Connectivity:** Bluetooth Class 2, v2.1 radio enables movement up to 33 feet (10m) from base, reduces interference with other wireless systems, and lowers total cost of ownership by allowing up to seven imagers to communicate to a single base
- **Long-Lasting Lithium-Ion Battery:** Powers up to 50,000 scans per full charge, ensuring maximum uptime
- **Flexible Power Management:** Allows user to limit radio power output of scanner, minimizing the likelihood of interference with other devices
- **Optional Disinfectant-Ready Housing:** Protects investment with durable construction that is better able to resist the harmful effects of harsh chemicals
- **Image Processing Software:** Offers advanced editing functionality—cropping, brightening, rotating, sharpening and more—to produce high-quality digital images
- **TotalFreedom™ 2.0:** Second-generation development platform enables the loading and linking of multiple applications on the scanner to enhance image processing, decoding or data formatting functionality, eliminating the need for host system modifications
- **Remote MasterMind™ Scanner Management Software:** Provides a quick and convenient solution for IT administrators seeking to manage all scanners within their network from a single remote location

# Xenon 1902 Technical Specifications

## Wireless

Radio/Range	2.4 to 2.5 GHz (ISM Band) Adaptive Frequency Hopping Bluetooth v2.1; Class 2: 10 m (33') line of sight
Data Rate (Transmission Rate)	3 Mbit/s (2.1 Mbit/s)
Battery	1800 mAh Li-ion minimum
Number of Scans	Up to 50,000 scans per charge
Expected Hours of Operation	14 hours
Expected Charge Time	4.5 hours

## Mechanical/Electrical

	Scanner	Charger/Communication Base
Dimensions (LxWxH)	104 mm x 71 mm x 160 mm (4.1" x 2.8" x 6.3")	132 mm x 102 mm x 81 mm (5.2" x 4" x 3.2")
Weight	214 g (7.5 oz)	179 g (6.3 oz)
Operating Power (Charging)	N/A	5 W (1A @ 5 V)
Non-Charging Power	N/A	0.5 W (0.1A @ 5 V)
Host System Interfaces	N/A	USB, Keyboard Wedge, RS232, IBM 46xx (RS485)

## Environmental

Operating Temperature	0°C to 50°C (32°F to 122°F)	Charging: 5°C to 40°C (41°F to 104°F) Non-Charging: 0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
Humidity	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing
Drop	Designed to withstand 50 1.8 m (6') drops to concrete	Designed to withstand 50 1 m (3.3') drops to concrete
Environmental Sealing	IP41	IP41
Light Levels	0 to 100,000 lux (9,290 foot-candles)	N/A

## Scan Performance

Scan Pattern	Area Image (838 x 640 pixel array)
Motion Tolerance	Up to 610 cm/s (240 in/s) for 13 mil UPC at optimal focus
Scan Angle	(HD): Horizontal: 41.4°; Vertical: 32.2° (SR): Horizontal: 42.4°; Vertical: 33° (ER): Horizontal: 31.6°; Vertical: 24.4°
Print Contrast	20% minimum reflectance difference
Pitch, Skew	45°, 65°
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*	High Density (HD)	Standard Range (SR)	Extended Range (ER)
Narrow Width			
5 mil Code 39	8 mm - 76 mm (0.3" - 3")	30 mm - 89 mm (1.2" - 3.5")	107 mm - 135 mm (4.2" - 5.3")
13 mil UPC	15 mm - 124 mm (0.6" - 4.9")	13 mm - 323 mm (0.5" - 12.7")	36 mm - 442 mm (1.4" - 17.4")
20 mil Code 39	15 mm - 173 mm (0.6" - 6.8")	15 mm - 411 mm (0.6" - 16.2")	30 mm - 561 mm (1.2" - 22.1")
6.7 mil PDF417	0 mm - 86 mm (0" - 3.4")	18 mm - 140 mm (0.7" - 5.5")	84 mm - 206 mm (3.3" - 8.1")
10 mil DM**	0 mm - 84 mm (0" - 3.3")	18 mm - 140 mm (0.7" - 5.5")	86 mm - 208 mm (3.4" - 8.2")
20 mil QR	0 mm - 140 mm (0" - 5.5")	0 mm - 262 mm (0" - 10.3")	5 mm - 394 mm (0.2" - 15.5")
Resolution 1D Code 39	3 mil (0.076 mm)	5 mil (0.127 mm)	5 mil (0.127 mm)
Resolution 2D DM**	5 mil (0.127 mm)	6.7 mil (0.170 mm)	7.5 mil (0.191 mm)

\*Performance may be impacted by bar code quality and environmental conditions  
\*\*Data Matrix (DM)



For more information:  
[www.honeywellaidc.com](http://www.honeywellaidc.com)

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