

# 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) | Up to 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)<br>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°<br>(SR): Horizontal: 42.4°; Vertical: 33°<br>(ER): Horizontal: 31.6°; Vertical: 24.4° |
| Print Contrast      | 20% minimum reflectance difference   |
| Pitch, Skew         | 45°, 65°   |
| Decode Capabilities | Reads standard 1D, PDF, 2D, Postal and OCR symbologies<br>*Note: Decode capabilities dependent on kit configuration            |
| 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         | 0 mm - 91 mm (0" - 3.6")     | 36 mm - 127 mm (1.4" - 5")    | 114 mm - 198 mm (4.5" - 7.8")  |
| 13 mil UPC            | 15 mm - 150 mm (0.6" - 5.9") | 13 mm - 401 mm (0.5" - 15.8") | 36 mm - 500 mm (1.4" - 19.7")  |
| 20 mil Code 39        | 20 mm - 208 mm (0.8" - 8.2") | 18 mm - 480 mm (0.7" - 18.9") | 38 mm - 643 mm (1.5" - 25.3")  |
| 6.7 mil PDF417        | 0 mm - 94 mm (0" - 3.7")     | 15 mm - 137 mm (0.6" - 5.4")  | 84 mm - 221 mm (3.3" - 8.7")   |
| 10 mil DM**           | 0 mm - 104 mm (0" - 4.1")    | 15 mm - 178 mm (0.6" - 7")    | 104 mm - 256 mm (4.1" - 10.1") |
| 20 mil QR             | 18 mm - 173 mm (0.7" - 6.8") | 15 mm - 371 mm (0.6" - 14.6") | 18 mm - 467 mm (0.7" - 18.4")  |
| 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)

## Honeywell Scanning & Mobility

9680 Old Bailes Road  
Fort Mill, SC 29707  
800.582.4263  
[www.honeywell.com](http://www.honeywell.com)

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