Honeywell

# Xenon 1900

## Area-Imaging Scanner

Xenon 1900, 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 1900 offers industry-leading performance and reliability for a wide variety of applications that require the versatility of area-imaging technology.

Powered by Adaptus® Imaging Technology 6.0, Xenon 1900 delivers superior bar code scanning and digital image capture. Xenon 1900 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 1900 decodes virtually all bar codes with ease.

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 1900 fits well in virtually any sized hand, reducing operator fatigue.

Built with durability in mind, Xenon 1900 can withstand up to 50 drops to concrete from distances as high as 6 feet. An IP41-rating provides added protection. With a solid-state design backed by a five-year warranty, Xenon 1900 is constructed to deliver years of uninterrupted performance.

## Features

- **Custom Sensor Optimized for Bar Code Scanning:** Improves scanning aggressiveness and protects investment by providing supply chain stability
- **Multiple Focal Options:** Three focal options (high density, standard range and extended range) provide application-specific scanning, leading to improved productivity
- **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 1900 Technical Specifications

| | |
|---|---|
| **Mechanical** | |
| **Dimensions (LxWxH)** | 104 mm x 71 mm x 160 mm (4.1˝ x 2.8˝ x 6.3˝) |
| **Weight** | 147 g (5.2 oz) |
| **Electrical** | |
| **Input Voltage** | 4 VDC to 5.5 VDC |
| **Operating Power** | 2.3 W (450mA @ 5 VDC) |
| **Standby Power** | 0.45 W (90mA @ 5 VDC) |
| **Host System Interfaces** | USB, Keyboard Wedge, RS232, IBM 46xx (RS485) |
| **Environmental** | |
| **Operating Temperature** | 0°C to 50°C (32°F to 122°F) |
| **Storage Temperature** | -40°C to 70°C (-40°F to 158°F) |
| **Humidity** | 0% to 95% relative humidity, non-condensing |
| **Drop** | Designed to withstand 50 1.8 m (6´) drops to concrete<br>Ratchet stand: Designed to withstand 50 1.2 m (4´) drops to concrete on each of the faces |
| **Environmental Sealing** | IP41 |
| **Light Levels** | 0 to 100,000 lux (9,290 foot-candles) |
| **Ratchet Cycles** | The ratchet stand shall support 10,000 cycles (each cycle is one full movement of the scanner either up or down) without losing its ability to keep the scanner in any ratchet position |
| **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 Focus: Horizontal 41.4°; Vertical: 32.2°<br>SR Focus: Horizontal: 42.4°; Vertical: 33°<br>ER Focus: Horizontal: 31.6°; Vertical: 24.4° |
| **Symbol Contrast** | 20% minimum reflectance difference |
| **Pitch, Skew** | 45°, 65° |
| **Decode Capability** | Reads standard 1D, stacked, 2D and postal symbologies; limited OCR font reading |

| 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)

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