

Xenon 1902g-bf

Battery-Free Wireless Area-Imager Scanner

The Honeywell Xenon™ 1902g-bf area-imager scanner incorporates the latest in battery-free technology, offering the freedom of Bluetooth® low-energy wireless technology without the maintenance hassles or long recharge time associated with traditional batteries. Like all other Xenon scanners, the 1902g-bf scanner delivers aggressive barcode scanning performance – even on poor-quality or damaged barcodes.

An integrated Bluetooth low-energy Class 2 radio gives users complete freedom of movement up to 10 meters (33 feet) from the base in a typical work environment. For added convenience, a paging system on the base activates auditory signals that help to locate a misplaced scanner. By eliminating the trip-hazard of tethered cables, the Xenon 1902g-bf scanner can provide a safer and more productive environment.

The scanner's wireless technology completely eliminates the battery, replacing it with super-capacitors capable of achieving a full charge in less than two minutes via the USB port (under 30 seconds when using a powered USB port or external wall adapter) and typically providing at least 450 scans on UPC/EAN codes without recharging. This makes the Xenon 1902g-bf scanner ideal for applications centered around POS, workstations and counters – for example, as the secondary scanner to a bioptic (in-counter) scanner, or in support of shipping and receiving functions at warehouses. With no battery, a common maintenance hassle is removed and the scanner is lighter and more environmentally friendly.

The Xenon plug-and-play scanner features a multi-interface design with automatic interface detection. By automatically configuring itself to the appropriate interface upon connection, the installation process is shortened, and the cumbersome task of scanning programming barcodes is eliminated.

Built on the proven Xenon platform, the 1902g-bf scanner offers high-performance linear barcode scanning and the convenience of wireless – all without a battery.



The Xenon 1902g-bf wireless scanner offers fast, accurate barcode scanning from up to 10 meters (33 feet) from the base – without the recharge time, expense and environmental impact of a battery.

FEATURES & BENEFITS



When fully charged, the Xenon 1902g-bf scanner can typically scan over 450 UPC/EAN codes without the need for recharging – more than enough to check out 25 customers during peak times, or scan a morning's worth of overnight deliveries.



Super-capacitors hold their charge for hours when fully charged. So operators who forget to place their scanner in the charger prior to break won't impact operations upon return.



Two fully independently configurable recharge alerts remind the operator to place the scanner back into the base for charging. The alerts can be configured to trigger at different levels of discharge and with different levels of urgency, ensuring continuous operation.



The Xenon 1902g-bf scanner is fully charged in under two minutes with a simple USB connection, and under 30 seconds when a powered USB or external power supply is used.



When a fully discharged scanner is placed in the base, the ready-to-scan LED on the base will typically flash in less than 20 seconds to notify the operator that there is sufficient power to support over 100 scans.

Xenon 1902g-bf Technical Specifications

BATTERY-FREE*

Number of Scans (based on default settings)

Fully Charged: Typically more than 450 scans

Ready-to-Go Notification: At least 25 scans (@1 scan/sec)

First Recharge Alert (30%): Typically occurs after 300 scans $\pm 10\%$

Second Recharge Alert (10%): Typically occurs after 400 scans $\pm 10\%$

Expected Full Charge Time (completely discharged)

Standard USB: Typically under 120 seconds

Powered USB/External Wall Power Adapter: Typically under 30 seconds

Expected Ready-to-Go Charge Time

Standard USB: Typically under 25 seconds

Powered USB/External Wall Power Adapter: Typically under 15 seconds

Use Time (5 scans/transaction, 1 min/transaction)

Fully Charged: Typically 25 minutes of usage

Ready-to-Go Notification: Typically 5 minutes of usage left

First Recharge Alert (flashing yellow LED): Typically 10 minutes of usage left

Second Recharge Alert (flashing red LED): Typically 5 minutes of usage left

Charge Cycles (from completely discharged): 500,000

WIRELESS

Radio/Range: 2.4 GHz to 2.5 GHz (ISM Band) Adaptive Frequency Hopping Bluetooth V4.2 Class 2/10 m (33 ft)

Data Rate: 130 Kbps

MECHANICAL/ELECTRICAL

Scanner

Dimensions: 104 mm x 71 mm x 160 mm (4.1 in x 2.8 in x 6.3 in)

Weight: 195 g (6.9 oz)

Operating Power: N/A

Non-Charging Power: N/A

Host System Interface: N/A

Charge and Communication Base

Dimensions: 132 mm x 102 mm x 81 mm (5.2 in x 4 in x 3.2 in)

Weight: 180 g (6.3 oz)

Operating Power: 5W (1A @ 5V)

Non-Charging Power: 0.5W (0.1A @ 5V)

Host System Interface: USB, Keyboard Wedge, RS-232, IBM 46xx (RS485)

ENVIRONMENTAL

Scanner

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 ft) drops to concrete

Environmental Sealing: IP42

Light Levels: 0 to 100,000 lux (9,290 ft-candles)

Charge and Communication Base

Operating Temperature:

Charging: 0°C to 50°C (32°F to 122°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)

Humidity: 0 to 95% relative humidity, non-condensing

Drop: Designed to withstand 50 1 m (3.3 ft) drops to concrete

Environmental Sealing: IP41

Light Levels: 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: (SR) Horizontal: 42.4°; Vertical: 33° (HD) Horizontal: 41.4°; Vertical: 32.2°

Symbol Contrast: 20% minimum reflectance difference

Pitch, Skew: $\pm 45^\circ$, $\pm 65^\circ$

Decode Capability: Reads standard 1D, PDF, 2D, Postal and OCR symbologies (Note: Decode capabilities dependent on kit configuration.)

Warranty: Three-year factory warranty

TYPICAL PERFORMANCE**	HIGH DENSITY (HD)	STANDARD RANGE (SR)
NARROW WIDTH	DEPTH OF FIELD	DEPTH OF FIELD
5 MIL CODE 39	0 mm – 104.1 mm (0 in – 4.1 in)	27.9 mm – 134.6 mm (1.1 in – 5.3 in)
13 MIL UPC	10.2 mm – 167.6 mm (0.4 in – 6.6 in)	10.2 mm – 439.4 mm (0.4 in – 17.3 in)
20 MIL CODE 39	10.2 mm – 233.7 mm (0.4 in – 9.2 in)	12.7 mm – 584.2 mm (0.5 in – 23.0 in)
6.7 MIL PDF417	0 mm – 109.2 mm (0 in – 4.3 in)	10.2 mm – 154.9 mm (0.4 in – 6.1 in)
10 MIL DM**	0 mm – 127 mm (0 in – 5.0 in)	12.7 mm – 190.5 mm (0.5 in – 7.5 in)
20 MIL QR	10.2 mm – 190.5 mm (0.4 in – 7.5 in)	15.2 mm – 383.5 mm (0.6 in – 15.1 in)
RESOLUTION 1D CODE 39	3 mil (0.076 mm)	5 mil (0.127 mm)
RESOLUTION 2D DM***	5 mil (0.127 mm)	6.7 mil (0.170 mm)

** Performance may be impacted by barcode quality and environmental condition.

***Data Matrix (DM)

For more information

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* All scan performance and time usage is based on 100% UPC/EAN Grade A barcode at room temperature. Performance will vary depending on quality of barcode, symbology scanned, environmental conditions, code length, etc.

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