

# XENON™

# 1970 SERIES

## Corded Scanner

Xenon 1970 integrates Honeywell's latest illumination technology and AI decoding algorithms, enabling faster and more accurate recognition of challenging DPM codes in manufacturing – including low contrast, curved surfaces, reflective materials, damaged codes, dot peen DPM, etc.

Xenon 1970 has the unique optical design allows reading of ultra-high density barcodes, with a minimum readable size of 2mil DataMatrix.

Xenon 1970 has optimized for various DPM barcode types, the Xenon 1970 is highly competitive in manufacturing scenarios and is widely applicable in: Electronics manufacturing, Automotive and auto parts industry, Lithium battery production, Photovoltaic (solar) industry.



## FEATURES & ADVANTAGES



### Innovative Illumination Design

Enables coverage of nearly all types of DPM (Direct Part Marking) barcodes. It can quickly and accurately read low-contrast codes, curved or rounded surfaces, highly reflective materials, damaged or incomplete codes, and dot peen DPM.



### Newly Designed Scanning Platform with AI Algorithm

The combination of a redesigned scanning platform and intelligent AI decoding algorithm delivers a significant leap in scanning speed and performance for customers.



### Advanced Optical System

Supports reading of ultra-high density barcodes commonly found in electronics manufacturing. Minimum readable density reaches 1.5mil (1D) and 2mil (2D).



### Stable Hardware Platform with New Industrial Design

Built on the reliable Xenon series hardware platform and enhanced with a fresh exterior design, making it more competitive in light industrial and commercial markets.



### Honeywell Scanner Management Utility (SMU)

Provides a comprehensive solution that automates the deployment and updating of scanners across various environments.

# XENON 1970 TECHNICAL SPECIFICATIONS

## MECHANICAL

### Dimensions:

108.2 mm x 70.4 mm x 160.2 mm  
(4.3 in x 2.8 in x 6.3 in)

**Weight:** 161g (5.68 oz)

**Input Voltage:** 4.75V DC to 5.25V DC

**Host System Interfaces:** USB, Keyboard  
Wedge, RS-232

**User Indicators:** Good Decode LEDs, Rear  
View LEDs, Beeper (adjustable tone and  
volume)

## 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

**Tumble:** 2,000 at 0.5 m (1.6 ft)

**Drop:** 1.8 m (6 ft) to concrete across  
operating temp range

**ESD:** ±8 kV indirect coupling plane, ±15kV  
direct air

**Environmental Sealing:** IP52

## SCAN PERFORMANCE

**Image Sensor:** 1280 x 1080 pixel array

### Motion Tolerance:

HD: 3.5 m/s (138 in/s) for 13 mil UPC at  
optimal focus

UD: 2.0 m/s (79 in/s) for 13 mil UPC at  
optimal focus

### Imager Field of View:

Horizontal 38°; Vertical 32°

**Print Contrast:** As low as 15%

**Roll, Pitch, Skew:** ±360°, ±65°, ±65°

**Decode Capabilities:** Reads standard 1D,

PDF, 2D, Postal Digimarc, DOT Code, and  
OCR symbologies

**Note:** Decode capabilities dependent on  
configuration

**Illumination:** White(5500k) direct  
illumination and blue(450nm) indirect  
illumination

**LED aimer light source:** 518 nm

## DECODE RANGES (DoF) TYPICAL PERFORMANCE\*

Focus		High Density (HD)		Ultra-High Density (UD)	
Symbology		Near Distance	Far Distance	Near Distance	Far Distance
5 mil Code 39	mm	0	130	0	60
	in.	0	5.12	0	2.36
13 mil UPC	mm	5	180	5	85
	in.	0.20	7.09	0.20	3.35
3 mil Data Matrix	mm	-	-	5	30
	in.	-	-	0.20	1.18
5 mil Data Matrix	mm	20	90	0	35
	in.	0.79	3.54	0	1.38
10 mil Data Matrix	mm	0	130	0	55
	in.	0	5.12	0	2.17
Resolution (1D)		3 mil		1.5 mil	
Resolution (2D)		4 mil		2 mil	

\* Performance may be impacted by barcode quality and environmental conditions.

## For more information

automation.honeywell.com

## Honeywell Industrial Automation

855 S Mint St  
Charlotte, NC 28202  
800-582-4263  
www.honeywell.com

**Honeywell**

# XENON™

# 1972 Series

## Cordless Handheld Scanner

Xenon 1972 integrates Honeywell's latest illumination technology and AI decoding algorithms, enabling faster and more accurate recognition of challenging DPM codes in manufacturing - including low contrast, curved surfaces, reflective materials, damaged codes, dot peen DPM, etc.

Xenon 1972 has the unique optical design allows reading of ultra-high density barcodes, with a minimum readable size of 2mil DataMatrix.

Optimized for various DPM barcode types, the Xenon 1972 is highly competitive in manufacturing scenarios and is widely applicable in: Electronics manufacturing, Automotive and auto parts industry, Lithium battery production, Photovoltaic (solar) industry.



## FEATURES AND BENEFITS



### Innovative Illumination Design

Enables coverage of nearly all types of DPM (Direct Part Marking) barcodes. It can quickly and accurately read low-contrast codes, curved or rounded surfaces, highly reflective materials, damaged or incomplete codes, and dot peen DPM.



### Newly Designed Scanning Platform with AI Algorithm

The combination of a redesigned scanning platform and intelligent AI decoding algorithm delivers a significant leap in scanning speed and performance for customers.



### Advanced Optical System

Supports reading of ultra-high density barcodes commonly found in electronics manufacturing. Minimum readable density reaches 1.5mil (1D) and 2mil (2D).



### Stable Hardware Platform with New Industrial Design

Built on the reliable Xenon XP series hardware platform and enhanced with a fresh exterior design, making it more competitive in light industrial and commercial markets.



### Honeywell Scanner Management Utility (SMU)

Provides a comprehensive solution that automates the deployment and updating of scanners across various environments.

**Honeywell**

# XENON 1972 Technical Specifications

## Mechanical

### Dimensions (L x W x H):

Scanner: 108.2 mm x 70.4 mm x 160.2 mm  
(4.3 in x 2.8 in x 6.3 in)

Presentation Base: 76.3 mm x 90.4 mm x  
124.9 mm (3.0 in x 3.6 in x 4.9 in)

### Weight:

Lithium-ion Scanner: 237g (5.75 oz.)

Presentation Base: 163g

Operating Power (Charging) Bases: 2.5W  
(500 mA at 5 V DC) Standard USB; 10W (2A  
at 5V DC) – when utilizing power adapter

Non-Charging Power (Bases): 0.75W (150  
mA at 5V DC)

Host System Interfaces: USB, RS-232

## ENVIRONMENTAL

### Operating Temperature:

Scanner: 0°C ~ 50°C (32°F ~ 122°F)

### Bases:

Charging: 5°C ~ 35°C (41°F ~ 95°F)

Non-Charging: 0°C ~ 50°C (32°F ~ 22°F)

Storage Temperature: -40°C ~ 70°C (-40°F ~  
158°F)

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

ESD (Scanners and Cradles): ±8 kV indirect  
coupling plane, ±15 kV direct air

Drop (Scanner): Engineered to withstand 50  
drops at 1.8 m (6 ft) to concrete across  
operating temp range

Tumble (Scanner): 2,000 at 0.5 m (1.6 ft)

Environmental Sealing (Scanner): IP52

Environmental Sealing (CCB): IP41

Light Levels: 0 – 100,000 lux

## Scan performance

Scan Pattern: Area imaging, 1280 x 1080  
pixel array

Motion Tolerance: HD – 3.5 m/s; UD – 2.0  
m/s

Area Imager Field of View: HD/UD –

Horizontal: 38°; Vertical: 32°

Print Contrast: As low as 15%

Roll, Pitch, Skew: ±360°, ±65°, ±65°

Decode Capabilities: Reads standard 1D,  
PDF, 2D, Postal Digimarc, DOT Code, and  
OCR Symbologies, etc.

Note: Decode capabilities depend on  
scanner configuration

Illumination: white light 2700K / blue light  
450nm

LED Aimer Light Source: 518 nm

## WIRELESS

Radio Range: 2.4GHz, Bluetooth radio v4.2  
with Adaptive Frequency Hopping, Class 1:  
100 m line of sight (default), programmable  
to Class 2: 10 m line of sight BLE available

## POWER OPTIONS

Battery: (based on default settings)– data  
based on utilization of power adapter

Capacity: 3300 mAh Li-ion (min)

Number of Scans (2 scan/sec): up to 80,000  
scans per charge

Expected Duration of Operation: 16 hrs

Expected Charge Time: 4.5 hrs

\* Supports USB BC1.2 charge ports, up to 2x  
faster charge rate

User Indicators: Good Decode LEDs, Rear  
View LEDs, Beeper (adjustable tone and  
volume), Charge Status LED Indicators,  
Battery LED indicator, Find my scanner  
button

## WARRANTY

### 1972 (cordless):

Scanner: 3-year factory warranty

Lithium-ion Battery Pack: 1-year

## Depth of Field (DoF)

TYPICAL PERFORMANCE*	High Density (HD)	Ultra-High Density (UD)
<b>NARROW WIDTH</b>		
5 mil Code 39	0 mm – 130 mm (0 in – 5.12 in)	0 mm – 60 mm (0 in – 2.36 in)
13 mil UPC	5 mm – 180 mm (0.20 in – 7.09 in)	5 mm – 85 mm (0.20 in – 3.35 in)
3 mil DM**	N/A	5 mm – 30 mm (0.20 in – 1.18 in)
5 mil DM**	20 mm – 90 mm (0.79 in – 3.54 in)	0 mm – 35 mm (0 in – 1.38 in)
10 mil DM**	0 mm – 130 mm (0 in – 5.12 in)	0 mm – 55 mm (0 in – 2.17 in)

\* Performance may be impacted by barcode quality and environmental conditions.

\*\* Data Matrix (DM)

## For more information

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MAKE IT**

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