

MS1690 Focus

Area-Imaging Scanner

Honeywell's MS1690 Focus® provides users with increased throughput for virtually all 1D and 2D bar code reading applications—including poorly printed or damaged bar codes—by incorporating high resolution imaging and true contact reading into an affordable solution.

MS1690 Focus is a high performance hand-held area-imaging scanner. This omnidirectional scanner decodes all of today's standard bar codes including 1D, GSI DataBar™, PDF417, microPDF, EAN/UCC Composite, Matrix and Postal Codes regardless of orientation.

For years, Honeywell has been designing and manufacturing fixed position industrial imaging systems that are used by some of the world's leading parcel handling companies, distribution centers, and postal services. That core technology combined with optical design expertise produced the Focus, a hand-held device built to endure today's toughest work environments, packed with the most complete set of features, ease of use, and stylish, modern design.

Focus can be utilized in a variety of applications such as: retail, healthcare, shipping/receiving and supply chain management. Its laser like reading of 1D codes and omnidirectional reading of 2D codes combined with a competitive price make it the obvious solution to a broad array of applications. With its arsenal of features, Focus is the all-in-one scanner.

The MS1691 Focus is ideal for applications that require high-density scanning. The MS1691 delivers quick and accurate scanning of 1D bar codes as small as 3.5 mil and 2D bar codes as small as 5 mil.

For more information on the MS1690 Focus area-imaging scanner, please visit www.honeywell.com/aidc



Features

- **TotalFreedom™:** Expands scanner functionality by allowing image processing, decoding and formatting plug-ins to be loaded directly to the scanner instead of the host system
- **Omnidirectional Scanning:** Eliminates need to orientate scanner to bar code
- **Mobile Phone Reading:** Excels at scanning coupons and tickets directly from the screen of a mobile device
- **CodeSelect™:** Scans up to 7 bar codes in a single flash and outputs data in any predetermined order
- **Flexible Licensing Solution:** Meets diverse scanning requirements by offering models with limited decoding capabilities—purchase decoding licenses to enable additional functionality as the need arises
- **Motion Tolerance:** Offers aggressive scanning of bar codes passing by the window in presentation mode

MS1690 Focus Technical Specifications

Operational

Light Source	Visible Red LED 645 nm ± 7.5 nm
Visual Indicators	Blue = ready to scan; White = good read; Yellow = automatic scanning
Host System Interfaces	USB, RS232, Keyboard Wedge, IBM 46xx (RS485)

Mechanical

Dimensions (LxWxH)	183 mm x 79 mm x 111 mm (7.2" x 4.4" x 3.1")
Weight	225 g (8 oz)

Electrical

Input Voltage	5 VDC ± 0.25 V
Operating Power (typical)	2 W (400 mA @ 5 V)
Standby Power (typical)	800 mW (160 mA @ 5 V)
DC Transformers	Class 2: 5.2 VDC @ 1 A
LED Class	Class 1: IEC60825-1, EN60825-1
EMC	FCC Part 15, IEC60825-1, EN55022 Class B

Environmental

Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Humidity	0% to 95% relative humidity, non-condensing
Drop	Designed to withstand 1.5 m (5') drops
Environmental Sealing	Sealed to resist airborne particulate contaminants
Light Levels	100,000 Lux (9,290 foot-candles)

Scan Performance

Scan Pattern	Area Image (1280 x 512 pixel array)
Motion Tolerance	47 cm/s (18 in/s) for 13 mil UPC at optimal focus
Scan Angle	Horizontal: 50°; Vertical: 20°
Print Contrast	20% minimum reflectance difference
Pitch, Skew	75°, 75°
Decode Capability	Reads standard 1D and GS1 DataBar symbologies. Visit www.honeywell.com/aidc/symbologies for details.
Warranty	5 year factory warranty



MS1690 Typical Performance*	
Narrow Width	Depth of Field
5.2 mil (1D)	38 mm - 146 mm (1.5" - 5.8")
7.5 mil (1D)	25 mm - 229 mm (1.0" - 9.0")
13 mil (1D)	0 mm - 330 mm (0" - 13.0")
10 mil (PDF)	0 mm - 330 mm (0" - 13.0")
15 mil (PDF)	0 mm - 432 mm (0" - 17.0")
*Resolution: 1D: 5 mil (0.127 mm) 2D: 7.5 mil (0.19 mm)	
*Performance may be impacted by bar code quality and environmental conditions	

MS1691 Typical Performance*	
Narrow Width	Depth of Field
4 mil (1D)	50 mm - 90 mm (2.0" - 3.5")
5.2 mil (1D)	55 mm - 98 mm (2.2" - 3.9")
13 mil (1D)	0 mm - 155 mm (0" - 6.1")
5 mil (2D)	50 mm - 88 mm (2.0" - 3.5")
7.5 mil (2D)	45 mm - 100 mm (1.8" - 3.9")
*Resolution: 1D: 3 mil (0.071 mm) 2D: 5 mil (0.127 mm)	
*Performance may be impacted by bar code quality and environmental conditions	

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