

# IS1650

## Self-Contained Area-Imaging Engine

Honeywell's IS1650 self-contained, area-imaging engine provides easy and reliable bar code scanning for self-service kiosks or other fixed-mount POS applications.

The IS1650 is ideal for bar code scanning related to self-vending, ID and boarding-pass verification, shipping/receiving, bill payments, supply-chain management and manufacturing automation.

With its omnidirectional capability, scanning one bar code or several becomes a simple and swift experience for self-service customers.

The IS1650 contains a high-resolution imaging sensor, and decodes all standard bar codes with minimal concern for orientation or print quality – even codes damaged, worn or wrapped in clear plastic.

The IS1650 separates itself from other 2D imaging engines with *CodeSelect™* technology, robust automatic activation and a 500-mHz processor. *CodeSelect* gives the IS1650 the ability to scan up to seven bar codes in a single flash and output the data in any predetermined order.

The IS1650 also features Honeywell's patent-pending *TotalFreedom™* open-system architecture which expands scanner functionality by allowing formatting, parsing and decoding plug-ins to be loaded directly to the IS1650 instead of the host system.

Forward-illuminating design supports intuitive up-close scanning by eliminating the “dead zone” associated with most imagers.

For more information on the IS1650 self-contained area-imaging engine, please visit [www.honeywell.com/aicd](http://www.honeywell.com/aicd)



## Features

- **Omnidirectional Scanning:** Eliminates the need to orientate scanner to bar code
- **CodeSelect:** Scans up to 7 codes in a single flash and outputs data in any predetermined order
- **IR Object Detection:** Provides robust activation for hands-free applications
- **Slim Form Factor:** Delivers superior performance in tight spaces
- **TotalFreedom:** Expands scanner functionality by allowing formatting, parsing and decoding plug-ins to be loaded directly to the IS1650 instead of the host system
- **Mobile Phone Reading:** Excels at scanning coupons and tickets directly from the screen of a mobile device
- **Motion Tolerance:** Offers aggressive scanning of bar codes passing by the window in presentation mode

# IS1650 Technical Specifications

## Operational

Light Source	LED 645nm ± 7.5 nm
Audible Indicators	7 tones or no beep
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)	116 mm x 80 mm x 62 mm (4.57" x 3.15" x 2.44")
Weight	204 g (7.2 oz)
Termination	10 pin modular RJ45

## Electrical

Input Voltage	5 VDC ± 0.25 V
Operating Current	330 mA @ 5 V - typical; 400 mA @ 5 V - peak
Idle Current	160 mA @ 5 V - typical
DC Transformers	Class 2: 5.2 VDC @ 1 A
LED Class	Class 1: IEC60825-1, EN60825-1
EMC	FCC Part 15, ICES-003, 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 m (3.3') drops
Vibration	7 G over 10-500 Hz
ESD	Functional after 100 15 kv discharges
Light Levels	0 - 100,000 Lux (9,290 foot-candles) (total darkness - direct sunlight)

## Scan Performance

Scan Pattern	Area
Sensor Resolution	1.3 megapixel
Motion Tolerance	47 cm/s (18"/s) for 13 mil UPC @ 10 cm (4") distance
Scan Angle	Horizontal: 45°; Vertical: 27°
Focal Point	7 cm (2.76")
Print Contrast	20% minimum reflectance difference
Decode Capability	<b>1D:</b> Code 39, Code 93, Code 128, UPC/EAN/JAN, Code 2 of 5, Code 11, Codabar, MSI Plessey, GS1 DataBar, Telepen, Trioptic <b>PDF:</b> PDF417, MicroPDF417 <b>2D:</b> QR Code, Micro QR Code, Data Matrix, Aztec Code, Maxicode, Codablock, Composite Code, POSTNET, PLANET, UPU, Intelligent Mail, Canada Post, Australia Post, Royal Mail RM4SCC, KIX Code <b>*OCR:</b> OCR-A, OCR-B, E-13B MICR <b>*Note:</b> Enable by purchasing decoding license



### For more information:

[www.honeywell.com/aidc](http://www.honeywell.com/aidc)

### Security & Data Collection

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Typical Performance*	
Narrow Width	Depth of Field
5.2 mil	38 mm - 146 mm (1.5" - 5.8")
7.5 mil	25 mm - 229 mm (1.0" - 9.0")
10 mil	0 mm - 330 mm (0" - 13.0")
13 mil	0 mm - 330 mm (0" - 13.0")
15.9 mil	0 mm - 432 mm (0" - 17.0")
10 mil (Data Matrix)	30 mm - 185 mm (1.2" - 7.3")
15 mil (Data Matrix)	30 mm - 265 mm (1.2" - 10.4")

\*Resolution: 5 mil (0.127 mm)  
 \*Performance may be impacted by bar code quality and environmental conditions

# Honeywell