

## HS-2D



## Handheld Imager

The HS-2D imager is a value level portable solution for decoding both linear barcodes and 2D symbols in common applications such as high contrast black and white labels. It reads symbols in any orientation, includes a built-in dual LED targeting system for quick and easy data capture, and is designed to withstand rugged industrial environments.

The HS-2D imager is ideal for any high contrast automated data application from clean rooms to industrial environments.

### HS-2D: At a Glance

- Decodes/second: up to 10
- Read Range: 0.5 to 6" (12 to 152 mm)
- USB, RS-232 Interface Options



ESP® Easy Setup Program: Single-point software provides quick and easy setup and configuration of all Microscan readers.

For more information on this product, visit [www.microscan.com](http://www.microscan.com).

#### Omnidirectional Reading

The HS-2D easily captures linear and 2D symbols in any orientation, at distances from 0.5 to 6" (12 to 152 mm). The wide read area allows fast and reliable decoding.

#### Easy to Use

HS-2D imagers use point-and-click targeting with different colored converging LEDs to quickly determine target range. Audible, vibrator, and multipurpose visual user systems provide real-time feedback.

#### High Processing Speed

Fast processing speed allows the HS-2D to acquire and decode multiple symbologies within seconds of each other, without any adjustment to the imager.

#### Rugged Design

Featuring a ruggedized design with a permanent lanyard hook, HS-2D imagers include a secured cable and durable overmolded housing capable of withstanding numerous 6 foot drops to concrete.

#### Flexible Communication

HS-2D imagers are available in two interface options: USB or RS-232.

#### Application Examples

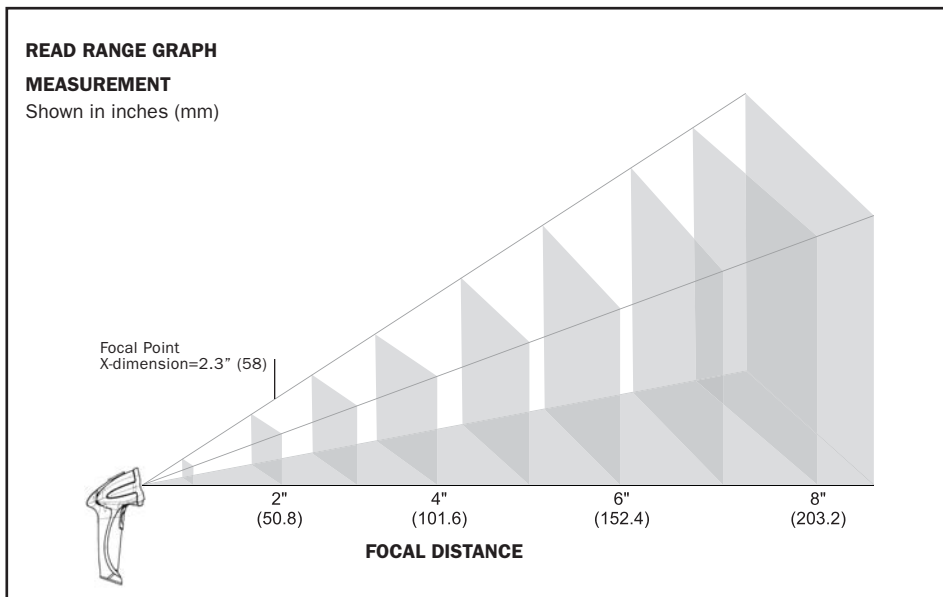
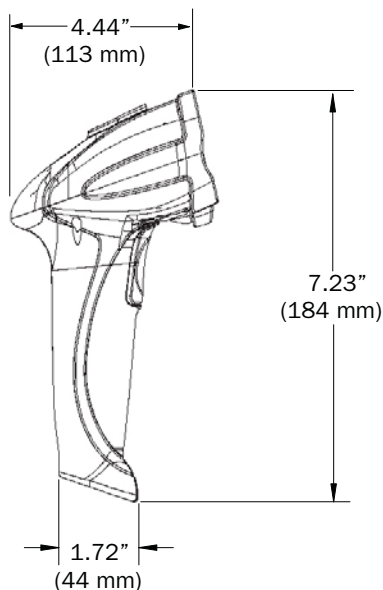
- Inventory
- Electronics
- Life Sciences

### HS-2D: Available Codes

Linear	All Standard 	Postal Codes 			
Stacked	MicroPDF 	PDF417 	GS1 Databar 		
2D	Data Matrix 	QR 	Micro QR 	Aztec 	Maxicode 

# MICROSCAN®

# HS-2D HANDHELD IMAGER SPECIFICATIONS AND OPTIONS



Narrow-bar-width	Read Range Distance
.0063" (0.160 mm)	1.25 to 2.5" (32 mm to 64 mm)
.0083" (0.211 mm)	1.75 to 3.2" (44 mm to 81 mm)
.020" (0.508 mm)	0.50 to 5.2" (13 mm to 132 mm)

Ranges based on Grade A Data Matrix symbols. Data subject to change.

## MECHANICAL

**Height:** 7" (180 mm)  
**Width:** 2.5" (63 mm)  
**Depth:** 4.5" (114 mm)  
**Weight:** 6.4 oz. (181 g), not including cable

## ENVIRONMENTAL

**Operating Temperature:** 0° to 50° C (32° to 122° F)  
**Storage Temperature:** -20° to 65° C (-4° to 150° F)  
**Humidity:** 5% to 95% (non-condensing)  
**Shock:** Withstands multiple drops of 6' (1.8 meters) to concrete

## CE STANDARDS

**Immunity:** EN 55024  
**ESD:** EN 61000-4-2  
**Radiated RF:** EN61000-4-3  
**Keyed Carrier:** ENV50204  
**EFT:** EN61000-4-4  
**Conducted RF:** EN61000-4-6  
**Emissions:** EN55022, Class B Radiated, Class B Conducted

## SYBIOLOGIES

**2D Symbolologies:** Data Matrix, QR Code, Micro QR Code, Aztec Code, MaxiCode  
**Stacked Symbolologies:** PDF417, MicroPDF417, GS1 Databar (Composite & Stacked)  
**Linear Barcodes:** Code 39, Code 128, Code 11, I2 of 5, UPC/EAN, Codabar, Codablock F, Pharmacode, Code 93, PLANET, PostNet, Japanese Post, Australian Post, Royal Mail, Intelligent Mail, KIX

## LIGHT COLLECTION OPTIONS

**Sensor:** CMOS, progressive scan, 1.33 MP, 256 grayscale  
**Sensor Array:** 1280 by 1024  
**Field of View:** 43.48° horizontal by 31.86° vertical  
**Focal Point:** Optimal at 2.3" (58 mm)

## COMMUNICATION PROTOCOLS

**Standard Interface:** USB, RS-232

## READ PARAMETERS

**Pitch:** ±60° (front to back)  
**Skew:** ±60°  
**Rotational Tolerance:** ±180°  
**Focal Range:** 0.5 to 6" (12 to 152 mm)  
**Print Contrast Resolution:** 25% (barcodes); 35% (PDF417) absolute dark/light reflectance differential, measured at 650 nm  
**Ambient Light Immunity:** Sunlight: Up to 9,000 ft-candles/96,890 lux

## INDICATORS

**Status Indicators:** Vibration motor, audible tones, visual feedback with multi-color LED

## IMAGE OUTPUT OPTIONS

**Format:** JPEG, Raw (uncompressed)

## ELECTRICAL

**Power Requirements:** 5 VDC (mA)  
**Typical:** 330mA **Peak:** 345mA **Idle:** 250mA

## SAFETY CERTIFICATIONS DESIGNED FOR

FCC, CE

## ROHS/WEEE COMPLIANT

## ISO CERTIFICATION

Certified ISO 9001:2008 Quality Management System

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 Read Range and other performance data is determined using high quality Grade A symbols per ISO/IEC 15415 and ISO/IEC 15416 in a 25° C environment. For application-specific Read Range results, testing should be performed with symbols used in the actual application. Microscan Applications Engineering is available to assist with evaluations. Results may vary depending on symbol quality. **Warranty**—One year limited warranty on parts and labor. Free extended 3 year warranty upon online product registration.

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