HS−2D

Lanyard Hook

Megapixel Imaging

Durable Industrial Design

RoHS • WEEE COMPLIANT

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

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.

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.
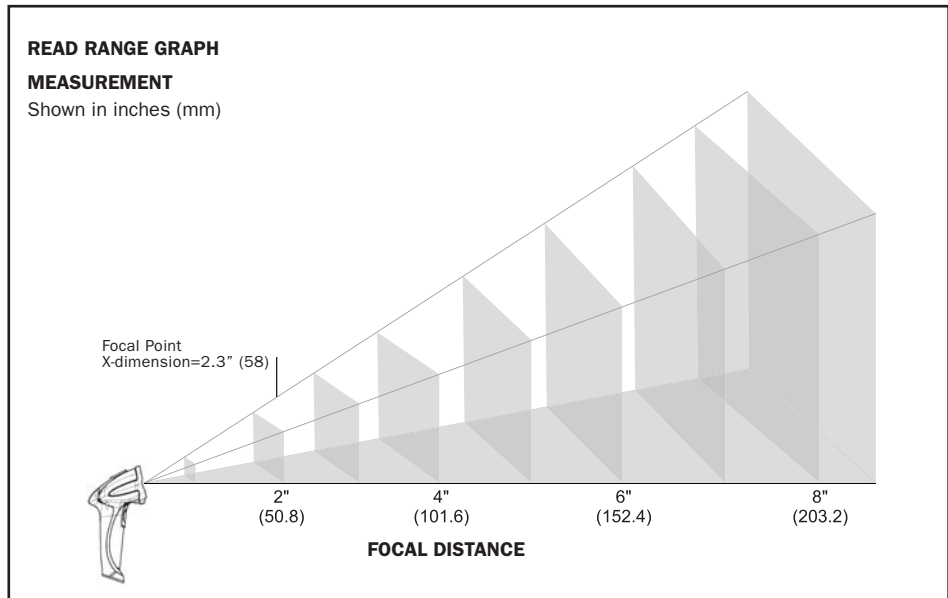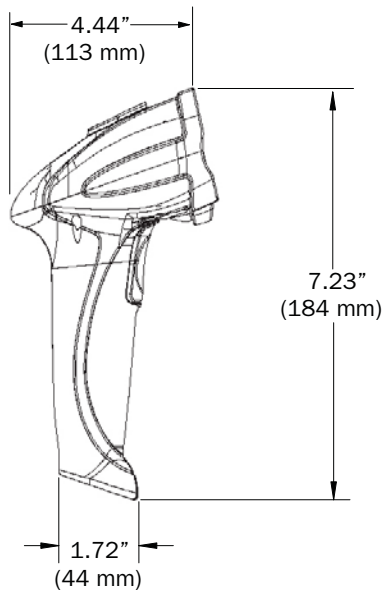
Application Examples
- Inventory
- Electronics
- Life Sciences

HS−2D: Available Codes

	All Standard	Postal Codes			
Linear					

	MicroPDF	PDF417	GS1 Databar		
Stacked					

	Data Matrix	QR	Micro QR	Aztec	Maxicode
2D					

MICROSCAN®

4.44” (113 mm)

7.23” (184 mm)

1.72” (44 mm)

READ RANGE GRAPH

MEASUREMENT
Shown in inches (mm)

Focal Point
X-dimension=2.3” (58)

2" (50.8)	4" (101.6)	6" (152.4)	8" (203.2)

FOCAL DISTANCE

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

SYMBOLOGIES
2D Symbologies: Data Matrix, QR Code, Micro QR Code, Aztec Code, MaxiCode
Stacked Symbologies: 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, Japenese 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

MICROSCAN®

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