

# MS-Q BASIC HANDHELD IMAGER

**MS-Q Basic imager is a portable handheld solution for reading both bar codes and 2D symbols.** The MS-Q reads a wide range of bar code symbols created from a variety of printing and marking methods.

## BASIC IMAGER FOR BAR CODES AND 2D SYMBOLS

### Read Area:

The MS-Q Basic imager's advanced "dual-decode zone" technology allows the user to easily capture 2D symbols and linear bar codes at varying distances from 2 to 20" (50.8 to 508 mm). This wide read area allows the symbols to be decoded fast and reliably.

Lightening fast processing speeds also add to the MS-Q's ability to acquire and decode multiple symbologies within seconds of each other, with no adjustment of the imager required.

### Ease of Use:

All MS-Q imagers feature point-and-click targeting with a red laser spot to quickly center the symbol in the field of view. Beeper, vibrator, and multi-purpose LEDs provide real-time feedback to signal successful decoding.



### Applications:

The MS-Q Basic imager is a strong reading solution for any application needing to read linear bar codes and 2D symbologies with a portable handheld device.

### System Integration:

All MS-Q imagers are available in 3 configuration options that provide effortless connectivity:

- **Batch:** A wireless way to collect thousands of decoded symbols for later download, capable of performing more than 4000 reads from a single battery charge and buffers a minimum of 1 MB of data in nonvolatile memory.\*

- **Cabled:** Cabled units can be connected in two ways: USB and RS-232.

- **Bluetooth:** Wireless data transmission using Bluetooth™ class 1 radio with a 328' (100 m) operating range.

\*For batch and Bluetooth™ options a 1300 mA Lithium-Ion battery is included.

### Symbologies:

The MS-Q Basic automatically discriminates between all major 2D matrix and linear bar code symbologies, and offers time stamp capability for logging data. Symbologies include:

#### 2D Symbologies:

- MaxiCode
- QR Code
- Aztec Code
- Data Matrix (ECC 0-200)

#### Stacked Symbologies:

- UCC Composite
- PDF417 (with Macro support)
- Micro PDF417

#### Linear Bar Codes:

- Codabar
- Codablock F
- GoCode
- Code 93
- RSS
- Code 39
- Code 128
- Standard postal codes
- UPC/EAN/JAN
- Int 2 of 5

### MS-Q Accessories:

- Long-life 1300 mA lithium-Ion battery
- Bluetooth modem (serial gateway) with 328' (100 m) operating range
- Two-bay battery charger
- RS-232 kit

# MS-Q BASIC IMAGER FOR BAR CODES AND 2D SYMBOLS

## SPECIFICATIONS AND OPTIONS

### IMAGER MECHANICAL

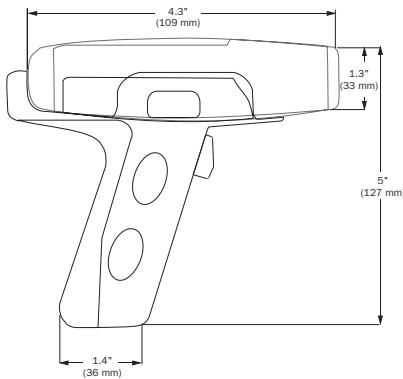
**Height:** 1.3" (33 mm)  
**Width:** 1.8" (46 mm)  
**Depth:** 4.3" (109 mm)  
**Weight:** 2.5 oz. (71.5 g)  
 not including cable

### HANDLE MECHANICAL

**Height:** 3.8" (96.5 mm)  
**Width:** 1.2" (30 mm)  
**Depth:** 1.4" (36 mm)  
**Weight:** 1.2 oz. (59.8 g)

### ADDITIONAL PHYSICAL CHARACTERISTICS

**Battery Weight:** 2.1 oz. (59.5 g)  
**Battery Blank:** .5 oz. (13.6 g)  
**Cable Length:** 6' (1.8 m)



### ENVIRONMENTAL

**Operating Temperature:** 0° to 40°C (32° to 104°F)  
**Storage Temperature:** -20° to 60° C (-4 to 140°F)  
**Humidity:** 5 to 90% (non-condensing)

### CE STANDARDS

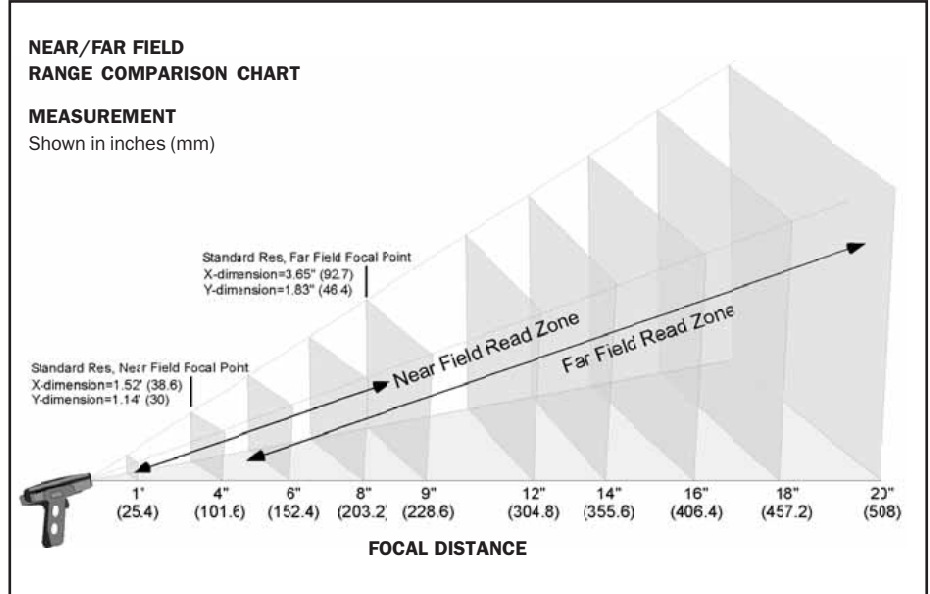
**Immunity:** EN 55024  
**ESD:** EN 61000-4-2 **Radiated RF:** EN61000-4-3  
**Keyed Carrier:** ENV50204 **EFT:** EN61000-4-4  
**Conducted RF:** EN61000-4-6,  
**Emissions:** EN55022, Class B Radiated,  
 Class B Conducted

### SYMBOLGY TYPES

Linear Bar Codes	
Code 39	Code 128
I2 of 5	Codabar
UPC/EAN	Codablock F
Go Code	RSS
Code 93	PLANET
PostNet	KIX Code
Postal Codes (Japan, Australia)	

2D Symbolgies	
Data Matrix (ecc 0-200)	MaxiCode
Aztec Code	QR Code

Stacked Symbolgies	
PDF417	UCC Composite
Micro PDF417	



### READ RANGES

Narrow Bar-Width	Read Range Distance
.0075" (.191 mm)	3.2 to 3.9" (81 to 99 mm)
.015" (.381 mm)	3.0 to 9.0" (76 to 229 mm)
.020" (.508 mm)	3.0 to 11.5" (76 to 292 mm)

Ranges based on Grade A, Data Matrix symbols.

### LIGHT COLLECTION OPTIONS

**Sensor:** CMOS, progressive scan, 1.33 MP (1024 by 1280) 256 gray scale  
**Field of View:**  
**Near:** 21.5° horizontal by 16.2° vertical  
**Far:** 22.9° horizontal by 11.6° vertical  
**Standard Resolution Focal Point:**  
**Near:** 4" (101.6 mm)  
**Far:** 9" (228.6 mm)  
**Sensor Array:**  
**Near Field:** 1024 by 640 **Far Field:** 1024 by 640

### COMMUNICATION PROTOCOLS

**Standard Interface:** USB  
**Optional Interface:** RS-232, Bluetooth Class 1  
 Radio at 328' (100 m)

### READ PARAMETERS

**Pitch:** ±60° (front to back)  
**Skew:** ±60°  
**Tilt:** 360°  
**Focal Range:** 4 to 20" (102 to 508 mm)  
**Rotational Tolerance:** ±180°  
**Print Contrast Resolution:** 25 percent (bar codes); 35 percent (PDF417); absolute dark/light reflectance differential, measure at 650 nm.  
**Target Beam:** Visible Laser Diode at 630 nm. Class 2  
**Ambient Light Immunity:** Sunlight: Up to 9,000 ft-candles 96,890 lux  
**Shock:** Withstands multiple drops of 6.5' (2 meters) to concrete

### INDICATORS

**Status Indicators:** Memory status, Battery power, Successful decode, and Connection status  
**Programmable Indicators:**  
 Beeper or Vibrate option; communicates scanner operation and communication functions to user

### IMAGE OUTPUT OPTIONS

**Format:** Jpeg, Raw (uncompressed)  
**Time Stamp:** Interval logging

### FIELD OF VIEW, STANDARD RESOLUTION

Distance inches/mm	Decode Zone (1024 x 640 pixel, Default)
<b>Near Field of View</b>	
4" (101.6)	1.52 X 1.14" (38.6 X 30 mm)
<b>Far Field of View</b>	
9" (228.6)	3.65 X 1.83" (92.7 X 46.4 mm)

### ELECTRICAL

**Power Requirements:** 5 VDC (mA)  
**Typical:** 310 **Peak:** 310 **Sleep:** 3

### Bluetooth Radio at 295' (90 m) away (mA):

**Typical:** 280 **Peak:** 350 **Idle:** 96 **Sleep:** 3

### Bluetooth Radio at 33' (10 m) away (mA):

**Typical:** 260 **Peak:** 350 **Idle:** 96 **Sleep:** 3

**Battery Life:** Battery with radio will support 4000 read/transmits per charge including 8 hours of standby interval.

### SAFETY CERTIFICATIONS

Designed for: FCC, CE

### ISO CERTIFICATION

ISO 9001/Cert. No. 00-1047

# MICROSCAN

This information is provided by:

### JETEC CORPORATION

2817 McGaw, Irvine, CA 92614

Tel 714 - 979 - 9611 / 949 - 477 - 6161 ☐☐

Fax 714 - 755 - 5950

Email: sales@jetec.com

**www.jetec.com**

**SHOP ONLINE**

©2004 Microscan Systems, Inc.

Specifications subject to change, 03/04 - Base B