Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

MS-Q QUADRUS®

MS-Q Quadrus: At a Glance

- *Decodes/second: up to 10*
- *Read Range: 2 to 16" (51 to 406 mm)*
- *Bluetooth, USB, RS-232 Interface Options*
- Rugged Handle Options:
  - Cabled
  - 3900 mAH

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.

MS-Q Quadrus: Available Codes

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

Imager for Direct Part Mark Reading

The MS-Q Quadrus is an aggressive performance handheld imager for decoding 2D symbols on low contrast substrates such as metal, plastic, rubber, and glass. It is optimized to read both linear barcodes and 2D symbols and excels at challenging marks such as those created by direct part mark (DPM) methods such as dot peen and laser/chemical etch.

The MS-Q Quadrus is a portable reading solution for any barcode or 2D application, even with difficult low contrast codes.

Optimized Resolution
The MS-Q Quadrus handheld imager is available in a high resolution optical version which is custom designed to optimize resolution for reading small 2D symbols in direct part mark applications. Also available, a standard resolution version is suitable for reading all printed symbols, plus many directly marked symbols.

User-Friendly Design
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 multipurpose performance indicators provide real time feedback.

Aggressive Decoding
Patented Quadrus decode algorithms provide outstanding performance on difficult low contrast or damaged 2D symbols.

Security Option
The secured version of the MS-Q Quadrus has disabled image capture and downloading. Permanent removal of its photographic functions allows use within sensitive industrial areas where photographic devices are prohibited.

IUID Codes
The MS-Q Quadrus can read IUID codes on a variety of surfaces. Software enables IUID code format validation and constructs the IUID string for DoD suppliers.

Application Examples
- Automotive
- Aerospace
- Electronics
- Department of Defense suppliers

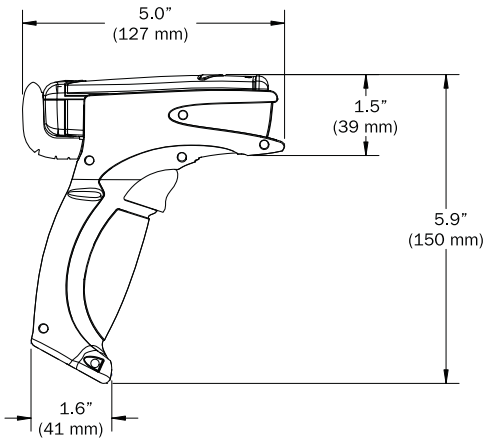
MICROSCAN®

MS-Q Quadrus® Imager Specifications and Options

IMAGER MECHANICAL
Height: 1.3" (33 mm)
Width: 1.8" (46 mm)
Depth: 4.3" (109 mm)
Weight: 4 oz. (113g) not including cable
Cable Length: 6' (1.8 m)

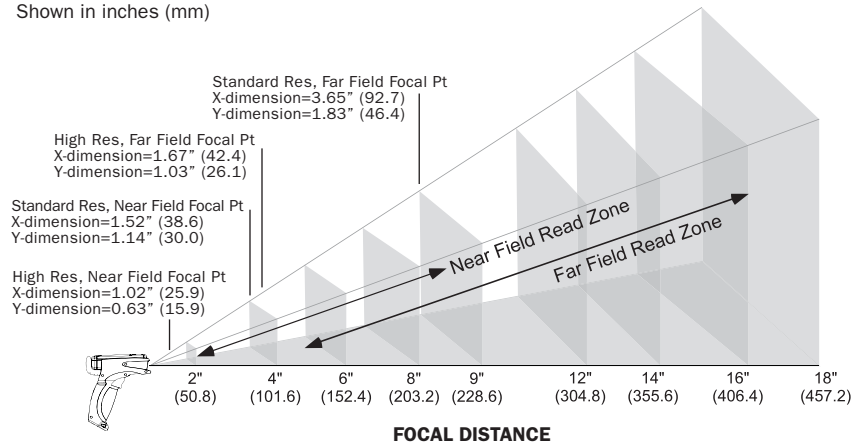
HANDLE & BATTERY CHARACTERISTICS
Cabled weight: 4.0 oz. (113)
Cabled weight with imager : 7.2 oz. (204 g)
With 3900 mAH battery: 6.4 oz. (181 g)
With 3900 mAH battery/imager: 9.6 oz. (272 g)

BATTERY BLANK HANDLE VIEW



NEAR/FAR FIELD FOCAL DISTANCE COMPARISON CHART

MEASUREMENT
Shown in inches (mm)



READ RANGES, STANDARD RESOLUTION

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 16.0" (76 to 406 mm)

READ RANGES, HIGH RESOLUTION

Narrow Bar-Width	Read Range Distance
.005" (.127 mm)	1.75 to 2.5" (44.4 to 63.5 mm)
.0075" (.191 mm)	1.75 to 4" (44.4 to 101.6 mm)
.010" (.254 mm)	1.75 to 4.75" (44.4 to 102.6 mm)
.015" (.381 mm)	1.75 to 6" (44.4 to 152.3 mm)
.020" (.508 mm)	1.75 to 6.5" (44.4 to 165.1 mm)

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

FIELD OF VIEW, STANDARD RESOLUTION

Near Field of View	
Distance (inches/mm)	**Field of View Size** (1024 x 640 pixel, Default)
4" (101.6)	1.52 x 1.14" (38.6 x 30 mm)
Far Field of View	
9" (228.6)	3.65 x 1.83" (92.7 x 46.4 mm)

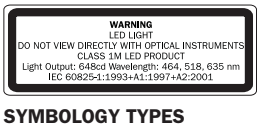
FIELD OF VIEW, HIGH RESOLUTION

Near Field of View	
Distance inches/mm	**Field of View Size** (1024 x 640 pixel, Default)
2" (50.8)	.74 x .46" (18.8 x 11.6 mm)
2.5" (63.5)	.93 x .57" (23.5 x 14.5 mm)
2.75" (69.9)	1.02 x .63" (25.9 x 15.9 mm)
3" (76.2)	1.11 x .68" (28.3 x 17.4 mm)
3.5" (88.9)	1.3 x .80" (33 x 20.3 mm)
4" (101.6)	1.48 x .91" (37.7 x 23.2 mm)
Far Field of View	
2" (50.8)	.74 x .46" (18.8 x 11.6 mm)
2.5" (63.5)	.93 x .57" (23.5 x 14.5 mm)
3" (76.2)	1.11 x .68" (28.2 x 17.4 mm)
3.5" (88.9)	1.3 x .80" (32.9 x 20.3 mm)
4" (101.6)	1.48 x .91" (37.6 x 23.2 mm)
4.5" (114.3)	1.67 x 1.03" (42.4 x 26.1 mm)
5" (127)	1.85 x 1.14" (47.1 x 28.9 mm)
5.5" (139.7)	2.04 x 1.25" (51.8 x 31.8 mm)
6" (152.7)	2.22 x 1.37" (56.5 x 34.7 mm)
6.5" (165.1)	2.41 x 1.48" (61.2 x 37.6 mm)

ENVIRONMENTAL
Operating Temperature: 0° to 50° C (32° to 122° F)
Battery Blank Operating Temperature: -35° to 50° C (-31° to 122° F)
Storage Temperature: -20° to 60° C (-4 to 140° F)
Humidity: 5 to 90% (non-condensing)
Shock: Withstands 100+ drops of 6.5' (2 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

LIGHT COLLECTION OPTIONS
Sensor: CMOS, progressive scan, 1.33 MP (1024 by 1280), 256 gray scale
Sensor Array:
Near Field: 1024 by 640 (default)
Far Field: 1024 by 640 (default)
Standard Resolution Field of View:
Near: 21.5° horizontal by 16.2° vertical
Far: 22.9° horizontal by 11.6° vertical
High Resolution Field of View:
Near & Far: 21° horizontal by 13° vertical
Standard Resolution Focal Point:
Near: 4" (101.6 mm) Far: 9" (228.6 mm)
High Resolution Focal Point:
Near: 2.75" (70 mm) Far: 4.5" (115 mm)



SYMBOLOGY TYPES
Linear Barcodes: Code 39, Code 128, I2 of 5, UPC/EAN, Codabar, Codablock F, Code 93, PLANET, PostNet, KIX Code, Postal Codes
Stacked Symbologies: PDF417, Micro PDF417, GS1 Databar
2D Symbologies: Data Matrix, MaxiCode, Aztec Code, QR Code, Micro QR Code

READ PARAMETERS
Pitch: ±60° (front to back) **Skew**: ±60° **Tilt**: 360°
Focal Range: 1 to 16" (25 to 406 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

INDICATORS
LED 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)

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

ELECTRICAL
Power Requirements: 5 VDC (mA)
Typical: 140 **Peak:** 310 **Idle:** NA/
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
Life of 3900 mAH Battery with Radio: Will support 8000 read/transmits per charge including 16 hours of standby interval.
Batch Memory: Minimum of 1MB

SAFETY CERTIFICATIONS
FCC, CE

ROHS/WEEE COMPLIANT

ISO CERTIFICATION
Certified ISO 9001:2008 Quality Management System

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.

MICROSCAN®

Microscan Systems Inc.
Tel 425 226 5700 / 800 251 7711
Fax 425 226 8250

Microscan Europe
Tel 31 172 423360 / Fax 31 172 423366

Microscan Asia Pacific
Tel 65 6846 1214 / Fax 65 6846 4641

www.microscan.com
Product Information: info@microscan.com
Auto ID Support: helpdesk@microscan.com
Vision Support: visionsupport@microscan.com
NERLITE Support: nerlitesupport@microscan.com