Quadrus® MINI Velocity

Compact Shape/Size

ACTUAL SIZE SHOWN
Height: 1" (25.4 mm)
Width: 1.80" (45.7 mm)
Length: 2.10" (53.3 mm)

Wide Field of View, Autofocus

Patented Quadrus® Technology

High Speed Mini Imager for ID

The Quadrus MINI Velocity sets the standard for high performance mini imagers for data tracking. The ultra-compact imager reads all standard 2D or linear bar codes, plus multiple codes per capture at high speed, with real time autofocus.

With easy setup and outstanding read rate performance, the Quadrus MINI Velocity is an ideal solution for virtually all dynamic bar code applications.

Quadrus MINI Velocity: At a Glance

- *Decodes/second: up to 45*
- *Patented Quadrus Technology*
- *Autofocus*
- *Optional USB Connectivity*

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

EZ Trax™: Image capture and storage software provides tracking of symbol images.

EZ Button: This performs reader setup and configuration with no computer required.

Visible Indicators: Performance indicators include "good read" green flash and LEDs, as well as the label positioning tool.
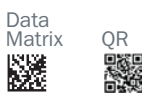
For more information on this product, visit www.quadrusmini.com.

Dynamic, High Speed Reading
The Quadrus MINI Velocity decodes linear bar codes or 2D symbols omnidirectionally in moving applications at speeds up to 100 inches per second (254 cm/sec).

Autofocus
Position the symbol at the center of the field of view, and push the EZ button for a true autofocus experience. The Quadrus MINI Velocity automatically adjusts focal distance and sets internal parameters to optimize reading of the symbol.

Wide Field of View
High resolution zero-distortion optics, diffractive full field illumination, and a wide field of view allow linear and 2D codes as large as 2" (50.8 mm) square to be read as close as 1" (25.4 mm) with the optional right angle mirror.

Q–Mode Option
Q-Mode algorithms provide the most consistent decoding available for a wide range of code types. Q-Mode also enhances the Field of View and adds ability to decode Micro QR, Aztec, and Postal codes.

Micro QR   Aztec

Postal Codes
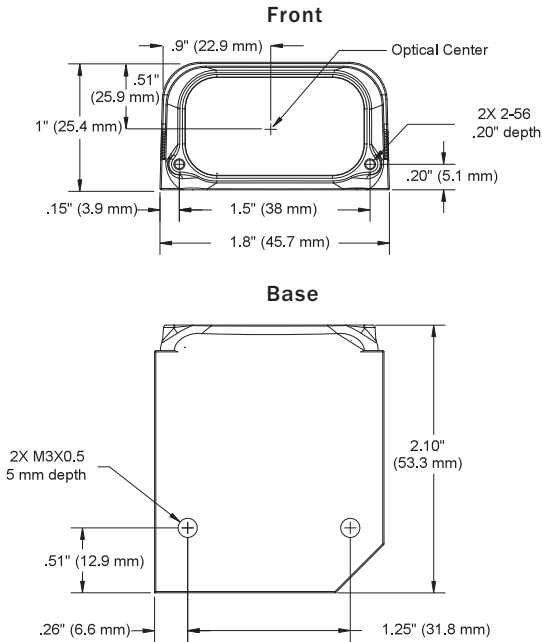
Compact Shape/Size
The Quadrus MINI Velocity's small form factor allows for flexible positioning in tight spaces or mounting into robotic applications.

Application Examples
- Document handling
- Pharmaceutical packaging
- Printed circuit boards
- Electronics assembly
- Assembly line manufacturing

Quadrus MINI Velocity: Available Codes

Linear	All Standard		2D Symbols	Data Matrix	QR

Stacked	MicroPDF	PDF417	GS1 Databar (RSS)

MICROSCAN®

Front

- .9" (22.9 mm)
- Optical Center
- .51" (25.9 mm)
- 1" (25.4 mm)
- 2X 2-56 .20" depth
- .20" (5.1 mm)
- .15" (3.9 mm)
- 1.5" (38 mm)
- 1.8" (45.7 mm)

Base

- 2X M3X0.5 5 mm depth
- 2.10" (53.3 mm)
- .51" (12.9 mm)
- .26" (6.6 mm)
- 1.25" (31.8 mm)

HOST CONNECTOR/PIN ASSIGNMENTS
High Density 15 Pin D-sub Socket Connector

Pin No.	Host RS232	Host/Aux RS232	Host RS422/485	In/Out
1	Power +5 VDC			In
2	TxD	TxD	TxD(−)	Out
3	RxD	RxD	RxD(−)	In
4	Power/Signal Ground			
5	NC			
6	RTS	Aux TxD	TxD(+)	Out
7	Output 1 TTL[a]			Out
8	Default configuration[b]			In
9	Trigger			In
10	CTS	Aux RxD	RxD (+)	In
11	Output 3 TTL[a]			Out
12	New Master (NPN)			In
13	Chassis ground[c]			
14	Output 2 TTL[a]			Out
15	NC			

a. Can sink 10 mA and source 10 mA.
b. The default is activated by connecting pin 8 to ground pin 4.
c. Chassis ground: Used to connect chassis body to earth ground only. Not to be used as power or signal return.

MECHANICAL
Height: 1" (25.4 mm)   **Width**: 1.80" (45.7 mm)
Depth: 2.10" (53.3 mm)   **Weight**: 2–oz (57 g)

ENVIRONMENTAL
Enclosure: IP54 (category 2)
Humidity: up to 90% (non-condensing)
Operating Temperature: 0° to 50°C (32° to 122°F)
Storage Temperature: -50° to 75° C (-58 to 167°F)

CE MARK
General Immunity for Light Industry:
EN 55024: 1998 ITE Immunity Standard
Radiated and Conducted Emissions of ITE
Equipment: EN 55022:98 ITE Disturbances

LIGHT SOURCE
Type: High output LEDs

LIGHT COLLECTION OPTIONS
Progressive scan, square pixel. Software adjustable shutter speed, electronic shutter
WVGA: 752 by 480 pixels

WARNING
LED LIGHT
DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS
CLASS 1 LED PRODUCT
Light Output: .564 mW. Wavelength: 470, 525, 617 nm.
IEC 60825-1:1993+A1:1997+A2:2001

SYMBOLOGY TYPES
2D Symbologies: Data Matrix (ECC 0-200), QR Code
Stacked Symbologies: PDF417, Micro PDF417, GS1 Databar (RSS - Composite & Stacked)
Linear Bar Codes: Code 39, Code 128, BC 412, I2 of 5, Pharmacode, UPC/EAN, Codabar, Code 93
Q-Mode Option: Micro QR Code, Aztec Code, Postal Codes

READ PARAMETERS
Pitch: ±30° **Skew:** ±30° **Tilt:** 360°
Decode Rate: Up to 45 decodes per second
Focal Range: 1.3 to 10" (33 to 254 mm) (autofocus)

CONNECTOR
Type: 3 ft. cable terminated with High Density 15-pin D-Sub socket connector or USB

INDICATORS
LEDS: Read Performance, Power, Read Status
Green Flash: Good read **Blue V:** Symbol locator
Beeper: Good read, match/mismatch, noread, serial command confirmation, on/off

COMMUNICATION PROTOCOLS
Standard Interface: RS-232, RS-422 or USB

ELECTRICAL
Power: 5 VDC +/− 5 %, 200 mV p-p max. ripple, 440 mA @ 5 VDC (typ.)
Optional Int.: 10-28 V Accy

DISCRETE I/O
Trigger Input: 5 to 28 vdc rated (.16 mA)
New Master: 5 to 28 vdc rated (.16 mA)
Outputs (1, 2, 3): 5V TTL compatible, can sink 10 mA and source 10mA
Optional I/O: Optoisolated (with IC-332 accessory)

SAFETY CERTIFICATIONS DESIGNED FOR
FCC, UL/cUL, CE, CB

ISO 9001:2000 Certified QMS

ROHS/WEEE COMPLIANT

ISO CERTIFICATION
Issued by TüV USA Inc, Member of TüV NORD Group, Cert No. 06–1080

MICROSCAN®