

VS-310

The VS-310 is the smallest, lightest, and most affordable fixed-mount scanner offered by Microscan.

Features include wide scan angle with two optional scanning patterns, two programmable outputs, bracketless top or bottom mounting, all enclosed in a compact IP54 rated housing weighing only 3 ounces. Set up and configuration is also fast and easy with Microscan's patented, Window's based ESP™ software (Easy Setup Program).

The VS-310's compact size combined with its feature set make it ideally suited for OEM applications or other space constrained environments.

BAR CODE SCANNER

Wide scan angle, exceptional read flexibility:

A wide scan angle and short focal point add up to space savings for your system. The VS-310 produces a 4-inch (10.16 cm) scan line at a distance of 2 inches (5.08 cm), making it ideal for integration in tight spaces. A ±50° pitch and ±40° skew allow for flexible label positioning. In addition, the VS-310 can read down a 0.25-inch (0.64 cm) slot from a distance of 5 inches (12.7 cm).

Easy Setup Program: The VS-310's unique Windows-based host download program called ESP™ assures fast, uncomplicated

bottom mounting without extra accessory brackets. Due to its wide scanning angle, a 4-inch (10.16 cm) scanning beam at a distance of 2 inches (5.08 cm), the VS-310 can be positioned up close to labels. This makes the VS-310 an ideal solution in any system where space is at a premium.

Two scanning beam patterns available: While other scanners offer just one beam pattern, the VS-310 offers optional patterns best suited to your application. Both patterns are projected from a 10-sided spinning mirror. Choose either a single line pattern or a raster pattern.

IP54 housing: The die-cast metal housing and industrial IP54 rated sealing protect circuitry and optical components against dust and moisture.

Multicolored status LEDs: Verify "good decodes" at a glance with the VS-310's multicolored LEDs. A programmable beeper provides additional auditory confirmation of read status.

Service options:

- Technical help desk
- Training
- On-site service
- 24-hour exchange program
- Extended warranty

Symbologies: The VS-310 comes standard with all widely used linear bar code symbologies, including:

- Code 39
- Codabar
- Interleaved 2 of 5
- Code 93
- Code 128

setup and configuration. Easy-to-use menus let you customize the RS-232 communication protocols, operating parameters, match codes, and bar code types.

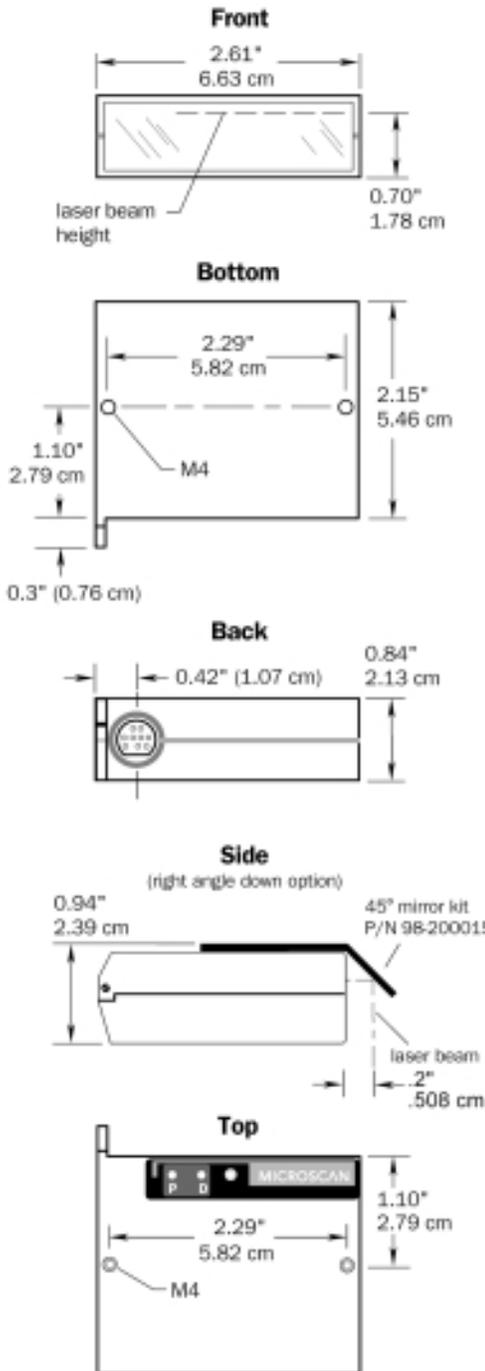
Ultracompact shape and size: The smallest and lightest scanner offered by Microscan, the VS-310 is big on performance, reliability, and accuracy. The 9-pin mini-DIN connector gives the VS-310 a sleek profile and eliminates the need for bulky mating connectors. Blind-threaded mounting holes allow optional top or



VS-310 LASER SCANNER

Specifications

MECHANICAL



ENVIRONMENTAL

Weight: Approximately 3 oz. (85 g)
Housing: NEMA 12, IP54 when used with specified connector
Operating temperature: 0° to 40°C (32° to 104°F)
Storage temperature: -50° to 75°C (-63° to 167°F)

READ RANGES

Narrow-bar-width	Read Range
HIGH DENSITY (60 SPS)	
.005" (.127 mm)	2.25" to 3" (5.72 to 7.62 cm)
.0075" (.191 mm)	2" to 3.5" (5.08 to 8.89 cm)
LOW DENSITY (100 SPS)	
.0075" (.191 mm)	2.5" to 4.5" (6.35 to 11.43 cm)
.010" (.254 mm)	2" to 5.5" (5.08 to 13.97 cm)
.015" (.381 mm)	2" to 6.5" (5.08 to 16.51 cm)
.020" (.508 mm)	2" to 7.25" (5.08 to 18.42 cm)

PIN ASSIGNMENTS

Pin No.	RS-232 Pin Function	RS-422/485 Pin Function
1	+5 VCC	+5 VCC
2	Output-1 ^a	Output-1 ^a
3	RXD	TXD+
4	Signal ground	Signal ground
5	TXD	TXD-
6	Trigger input	Trigger input
7	Default pin	Default pin
8	Output-2 ^a	RXD+
9	RS-485 driver enable	RXD-
Shield	Chassis ground ^b	Chassis ground ^b

^a Can sink 3.5 mA or source 60 µA

^b Chassis and signal ground connected internally through 0 OHM Resistor.

Humidity: Up to 90% (non-condensing)

LASER LIGHT

Type: Semiconductor visible laser diode (670 nm nominal)

Safety class: CDRH Class II

SCANNING PARAMETERS

Type: 10-sided, single line or raster, spinning mirror

Scan rate: High Density - 60 scans per second. Low Density - 100 scans per second

Scan width: 4" (10.16 cm) @ 2.75" (6.99 cm) from window (7.5 mil and larger bar widths)

Pitch: ±50°

Skew: ±40°

Label contrast: 25% min. absolute dark to light differential at 670 nm wavelength

COMMUNICATION

Interface: RS-232 or RS-422/485 (option)

PROTOCOLS

Point-to-Point • Point-to-Point w/Xon/Xoff • Polling Mode D • Multidrop • User defined • User defined multidrop

CONNECTORS

Type: 9-pin mini-DIN connector

ELECTRICAL

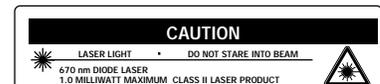
Power requirement: +5 VDC ±4% @ 200 mA

STATUS LIGHTS

LED	Color	Condition
Power LED	Yellow	On power-on
Status LED	Green	Normal operations: illuminates whenever a bar code label is decoded and remains on until a new trigger occurs. Continuous Read or Continuous Read 1 Output: flash for each good read.

SAFETY CERTIFICATIONS

CDRH, FCC, CE, TuV and UL/cUL



ISO 9001/Cert. No. US96/0465

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 Specifications subject to change.

Product specifications are given for typical performance at 25°C (77°F) using grade A Code 39 labels. Some performance characteristics may vary at high temperatures or other environmental extremes.

Warranty—One year limited warranty on parts and labor. Extended warranty available.

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 R.O.

Tel 65 846 1214 / Fax 65 846 4641

Part of a full range of sales tools available from our web site:

www.microscan.com

E-mail: info@microscan.com