EZ MATCH COLOR

EZ Match Color: At a Glance

- *Decodes/second: up to 10*
- *Wide Field of View*
- *EZ Match: Monochrome model available*

ESP® : Single-point software provides 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, visit www.microscan.com.

EZ Match Color: Available Codes

Linear — All Standard

2D Symbols — Data Matrix, QR

Stacked — MicroPDF, PDF417, GS1 Databar

Compact Imager & Cap Inspector

The EZ Match Color imager is capable of reading linear and 2D codes, detecting the absence or presence of test tubes and caps, determining cap type, and more. In addition to its small size and wide angle optics, the EZ Match Color features advanced software to allow for robust inspection.

EZ Match Color is an evolving product for design engineers tasked with complete data integrity during the implementation of specimen container inspection systems.

Tube and Cap Detection
The EZ Match Color verifies the absence or presence of both test tubes and caps, and provides a user-defined output message. Determining cap absence or presence is essential for diverting test tubes to appropriate locations.

Capture tube and cap presence

Omnidirectional Reading
Both linear bar codes or 2D symbols can be decoded by the EZ Match Color in any orientation. Fast decoding and performance LEDs contribute to overall excellence.

Wide Field of View
The EZ Match Color has an extremely wide field of view and reads linear codes or 2D symbols as close as 1" (25 mm).

Cap Evaluation
The EZ Match evaluates cap color and several cap dimensions in order to determine the cap type. The system uses this info to verify contents, and can give valuable feedback to an automated decapper.

Easily configure using ESP software

Compact and Lightweight
The small form, right angle mirror option, and corner-exit cable of the EZ Match Color allow flexible positioning within instrumentation and equipment. The lightweight and durable magnesium alloy case weighs less than 2 oz.

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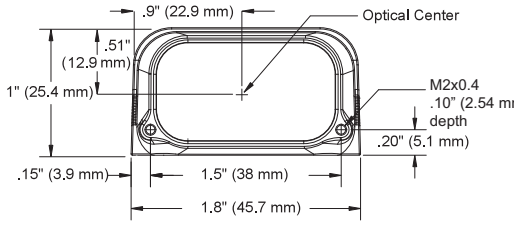
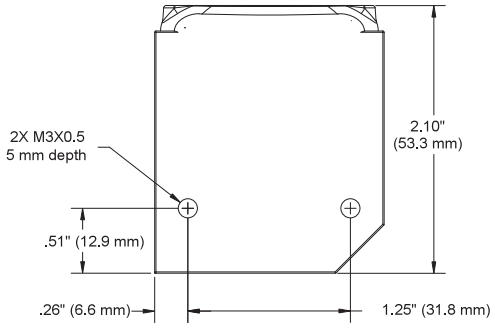
EZ Match Color Specifications and Options

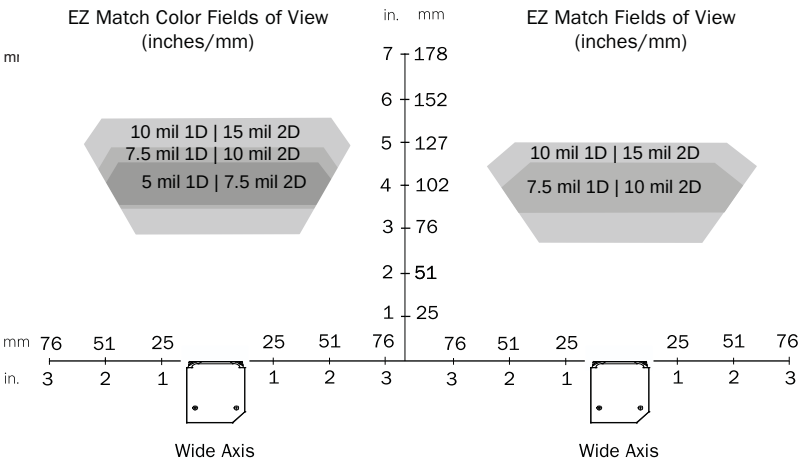
Front



Base



READ RANGES (GRAPHS AND TABLES)



EZ MATCH COLOR

Narrow bar-width		Field of view (width)	Read range
1D	2D	(maximum)	
.005" (0.13mm)	.0075" (0.19 mm)	4.2" (106.7 mm)	3.6 to 4.5" (91.4 mm to 114.3 mm)
.0075" (0.19 mm)	.010" (0.25 mm)	4.5" (114.3 mm)	3.4 to 4.9" (86.4 mm to 124.5 mm)
.010" (0.25 mm)	.015" (0.38 mm)	5.5" (139.7 mm)	2.9 to 5.6" (73.7 mm to 142.2 mm)

EZ MATCH

Narrow bar-width		Field of view (width)	Read range
1D	2D	(maximum)	
.0075" (0.19 mm)	.010" (0.25 mm)	4.2" (106.7 mm)	3.3 to 4.5" (83.8 mm to 114.3 mm)
.010" (0.25 mm)	.015" (0.38 mm)	4.5" (114.3 mm)	2.75 to 5.0" (69.9 mm to 127 mm)

Subject to change. Contact Microscan for updated graphs.

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 white LEDs

LIGHT COLLECTION OPTIONS
Progressive scan, square pixel. Software adjustable shutter speed, electronic shutter
EZ Match Color: QXGA (2048 by 1536 pixels)
EZ Match: SXGA (1280 by 1024 pixels)

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

READ PARAMETERS
Pitch: ±30° **Skew**: ±30° **Tilt**: 360°
Decode Rate: Up to 10 decodes per second

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

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.

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

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®

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