

# Long-Range Bar Code Labels



Looking for an easier way to keep track of your warehouse inventory? Long-Range Bar Code Labels are the solution you have been waiting for. These unique labels are ideal for warehouse applications even in large warehouses or manufacturing facilities where bar code labels are not always easily accessible.

The highly reflective material makes it possible to scan from up to 35 feet away while the permanent pressure-sensitive adhesive adheres well to high surface energy metals and plastics such as aluminum, steel, ABS, nylon, Noryl, and more. The slit liner makes it easy to peel the label from the liner and apply to the mounting surface.

## Key Product Features

- Highly reflective material allows for scanning from distances of up to 35 feet
- Permanent pressure-sensitive acrylic adhesive adheres well to most surfaces including high surface energy metals and plastics
- Slit liner makes it easy to peel the label from the liner and apply to the mounting surface

Not sure what product you need?

Call our trained Experts!

**423-629-6245**



AUTHORIZED DISTRIBUTOR:  
**Marsh Micro Systems, Inc.**  
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(423) 629-6245 sales@marshmicrosystems.com



# Long-Range Bar Code Label Specifications

Material: .004" thick RetroReflective vinyl.

Serialization: Bar code with human-readable equivalent for serialization; may include alphanumeric characters. Guaranteed no skips in sequence. Code 39 is standard. Code 128 is optional. You will need to provide the "X" dimension and ratio supplied by your scanner manufacturer to Metalcraft prior to production.

Size: We can custom-make many different sizes up to a maximum height of 9" and a maximum length of . All labels are provided individually with square corners. Scan distance and number of characters encoded in the bar code have a direct bearing on the size (length) of the label. Refer to "X" dimension chart for Code 39 to determine size.

Label Copy: The label copy can include block type only. Stylized type, logos, and other designs not available.

Colors: The bar code is always printed in black.

Adhesive: .001" permanent pressure-sensitive acrylic adhesive supported by a liner. Provides a good bond to high surface energy metals and plastics such as aluminum, steel, ABS, nylon, Noryl, etc. Shelf life of 24 months if stored at 72°F (22°C) and 50% relative humidity.

Packaging: Each individual label is packaged in sequential order. Both cartons and label packages are clearly marked to indicate serial numbers of contents. All orders are shipped with cleaner and application instructions.

Shipment: 10 work days after receipt of order with approved artwork.

To Order: Call **1-423-629-6245** and ask for customer service.

## "X" Dimension Chart

Bar Code Symbology: Code 39\*

"X" Dimension	Length Per Character (2.25:1 Ratio)**	Length Per Character (3:1 Ratio)**
.030"	.4200"	.4875"
.040"	.5600"	.6500"
.050"	.7000"	.8125"
.060"	.8400"	.9750"
.070"	.9800"	1.1375"
.080"	1.1200"	1.3000"
.090"	1.2600"	1.4625"
.100"	1.4000"	1.6250"

To determine the label length, follow procedure below:

1. Choose the "X" dimension and ratio that are recommended by the scanner manufacturer. The "X" dimension determines the scan distance. EXAMPLE: "X" = .050" and the ratio is 3:1. Length per character = .8125".

2. Multiply the length per character times the number of characters (include start and stop characters) to determine the length of the bar code. EXAMPLE: 5-digit bar code. Add start and stop. 7 characters x .8125 = 5.6875".
3. Determine quiet zone needed. Minimum quiet zone required is 10X or 10 times the "X" dimension. Do not forget that you need quiet zone for the beginning and end of the bar code message. EXAMPLE: If "X" = .050", the length of the quiet zone = .050" x 10 = .50". Total quiet zone length = 2 x .50" = 1.00".
4. Add length of bar code to quiet zone required for total length of label. EXAMPLE: 5.6875" + 1.00" = 6.6875" minimum length required.
5. The height of the bar code has a direct bearing on the scan distance. Bar code height should be a minimum of 15% of the bar code length. The taller the bar code the easier it is to scan from distances of up to 35'. EXAMPLE: If the bar code is 8.00" in length, the height should be a minimum of 1.20".



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