

CRACKING THE BARCODE:

YOUR PRIMER TO BARCODE SYMBOLOGY

There's so much more to barcodes than what meets the eye, or the scanner.

Each barcode has a unique symbology, which represents the encoding of information into the barcode image.

A barcode's symbology takes many different shapes and sizes. Knowing the difference between them can greatly affect your operational efficiency.

Learn more about the different types of 1D and 2D barcodes

One-Dimensional

Traditional (1D), linear barcodes represent data by varying the width and spacing of parallel lines. Speed and flexibility are two of the biggest advantages.



12A34B56C

Code 128

(high-density linear barcode)



- **Primarily used in warehouses for:**

Rack Labeling, Pallet Tracking, Bulk Storage

- **Alphanumeric or Numeric-only barcodes**

with full ASCII character set



- **Offers greater security and more compact**

than Code 39 barcodes



1234ABCD

Code 39

(variable length barcode)



- **Primarily used for asset tracking in:**

Educational & Government Institutions

- **Specification defines 43 characters:**

Uppercase Letters, Numbers, Special Characters

(-, ., \$, /, +, %, and Space)



Two-Dimensional

(2D) barcodes use rectangles, dots, hexagons and other geometric patterns, called matrix codes, that can contain more information than a 1D barcode.



DataMatrix

(2D black & white celled barcode)



- **Primarily used for asset tracking in:**

Government, Electronics

- Growing in popularity in warehouses as scanner tech advances

- Encodes up to **2,335 characters** of alphanumeric data

- **Offers similar range and contains more data**



QR Code

(quick response code)

See a QR code in action, scan here to learn more about barcode symbology



Store large amounts of info in a small area, making them a versatile option across a wide range of applications, including:

- **Marketing** (promos, product info, payments)

- **Healthcare** (patient data access)

- **Logistics** (package tracking)

- **Warehouse Management** (inventory tracking)

- **Education** (resources, maps, schedules)



Find the Right Barcode for Your Operation's Needs

Every operation, like a unique barcode symbology, requires careful consideration. When selecting the correct barcode for your operation, your scanner technology is a key factor. It dictates the types of barcodes and material you can use and your effective scanning range. ID Label has the expertise to evaluate your operation and quickly determine the right barcode and labeling solutions you need.