BinaryStream

Label Printing in Healthcare Materials Management (HMM).

binarystream.com
+1 604 522 6300
800-7300 Edmonds St,
Burnaby BC, V3N 0G8

Introduction.

Healthcare Materials Management (HMM) enhances operational efficiency by enabling users to print labels for inventory management. These labels streamline data capture and retrieval by encoding critical information related to Items, Locations, Stockkeeping Units (SKUs), and Charge Codes into barcodes.

The Label Printing Functionality allows seamless barcode printing directly from Business Central using RDLC Layouts, eliminating the need for Zebra Programming Language (ZPL) and ensuring compatibility with standard label printers. This functionality supports both 1D barcode types (Code-39 and Code-128) and printing via browser print dialog and PDFs.

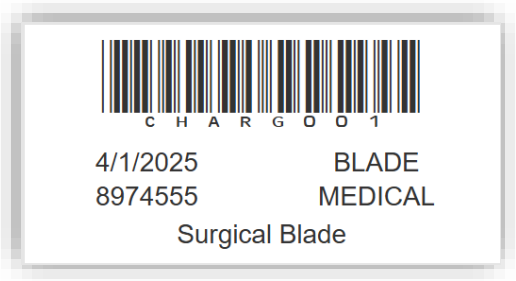
Label Types & Their Purpose.

HMM provides four distinct label types to meet various operational needs:

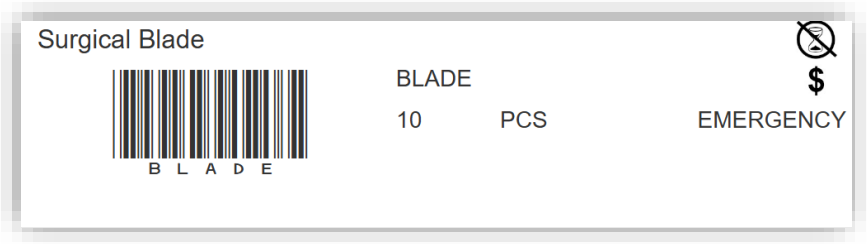
1. Wall Label (2" x 1")
    - Printed for a specific Location.
    - Encodes Location Code in the barcode.
    - Displays Location Description for easy identification.

2. Piggyback Label (2" x 1")
    - Printed for Item-Location combinations where items are marked as Chargeable.

- Encodes Charge Code from the Item Card in the barcode.
- Displays Item Code, Item Description, Location Code, and Vendor Item Number.
- Can be printed from Item and Stockkeeping Unit pages.

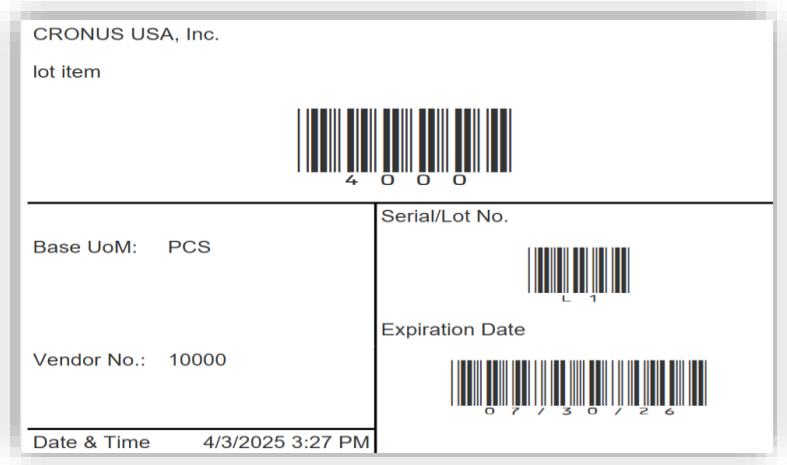


3. Shelf Label (4" x 1")
   - Printed for Stockkeeping Units.
   - Encodes Item Code in the barcode.
   - Displays Item Description, Location, Par Quantity, Vendor Item Number, Chargeable Status, and Expiration Information.



4. HMM Item Label (4" x 6")
   - Printed for processed Purchase Order (PO) Items.
   - Allows bulk printing for multiple Posted Purchase Invoices.
   - Encodes multiple barcodes for Item, Lot/Serial, and Expiration Date.

- Displays Item No, Item Description, Base UoM, Vendor, Serial/Lot No, and Expiration Date.



Barcode Encoding Options.

HMM offers the flexibility to print barcodes using two widely recognized standards:

- Code-39:
  - Supports 43 characters (A-Z, 0-9, space, special characters - . $ / + %).
  - Ability to enable checksum and allow extended character set.
- Code-128:
  - Supports all 128 ASCII characters (letters, numbers, symbols).
  - Ability to choose a Code Set (A,B or C) to efficiently encode data.

Printer Requirements & Compatibility.

HMM's Label Printing functionality is designed for maximum compatibility with standard Label Printers. It has been tested successfully on Zebra ZD420 4" Desktop Printer (209 DPI) and supports both 209 DPI and 300 DPI printers.

Recommended Printer Specifications:

- DPI Support: 203 DPI & 300 DPI
- Maximum Print Width:
    - 203 DPI: 4.09 in./104 mm
    - 300 DPI: 4.27 in./108 mm
- Supported Print Methods:
    - Browser Print Dialog
    - PDF Printing
- Label Size Compatibility:
    - Shelf Label = 4" x 1"
    - Item Label = 4" x 6"
    - Piggyback Label = 2" x 1"
    - Wall Label = 2" x 1"
- 1D and 2D Barcode Printing Support
    - HMM currently prints 1D barcodes only.
    - Printer should support both 1D and 2D barcodes for future scalability.

Configuration & Setup Considerations.

Users may need to perform minor configurations in Label Printer to ensure optimal label printing, including:

- Ensuring barcode scaling is set to proportional to maintain clarity and avoid distortions. This option might not be available on some label printers.
- Updating printer drivers to their latest versions.
- Adjusting printer settings for accurate label alignment and print quality.

Conclusion.

The Label Printing Functionality in HMM significantly improves efficiency in healthcare inventory management by offering customized label printing with barcode encoding. This enables quick scanning, accurate tracking, and seamless data capture while ensuring compatibility with standard label printers. The ability to print barcodes via browser and PDFs without ZPL dependency makes it an accessible and robust solution for healthcare organizations.