Wireless Inventory Applications

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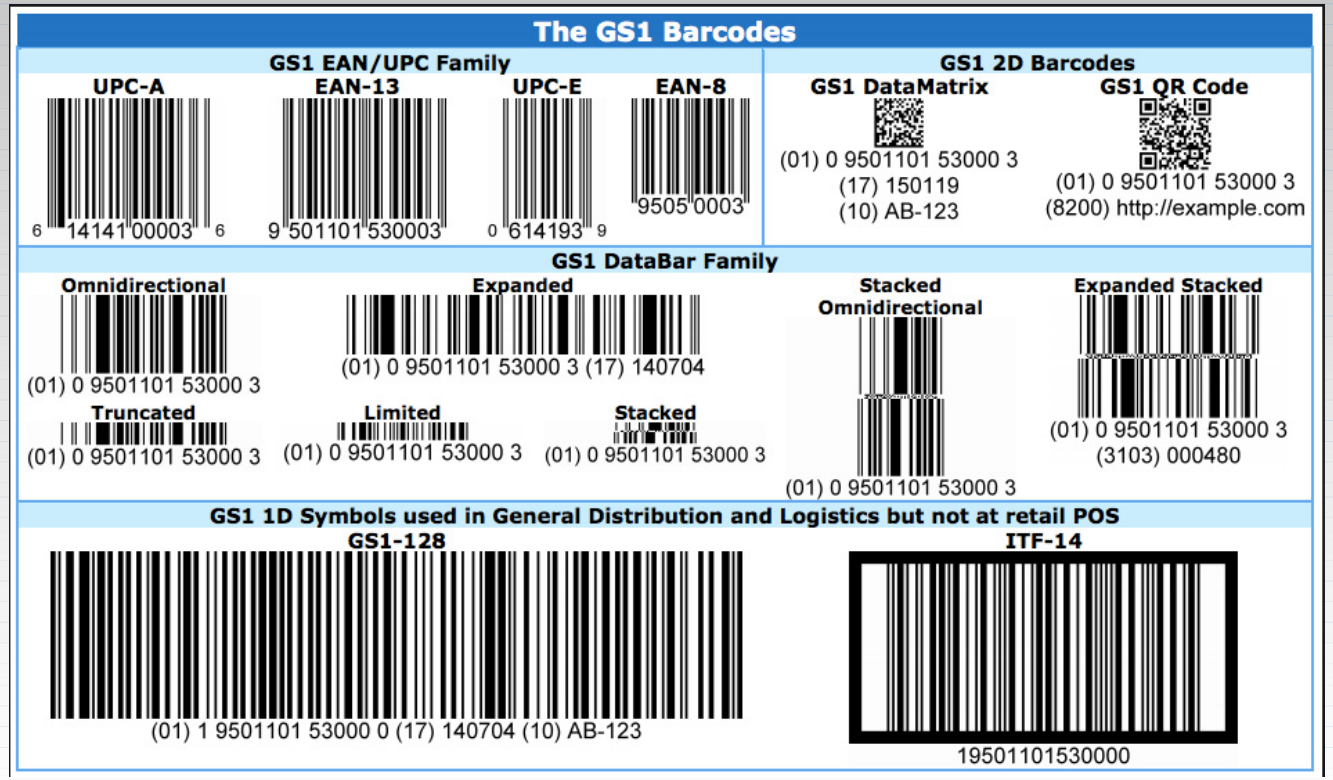
Barcoding as a Continuous Improvement Initiative



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Why Go Wireless?

- **Improved inventory accuracy**
  - ✓ **Eliminates errors resulting from written counts & subsequent keying**
- **Faster inventory transactions**
- **Real time inventory adjustments**
- **Real time inventory movement & tracking**
- **More efficient and accurate cycle & physical counts**
- **Lean**
  - ✓ **Improved Productivity**
  - ✓ **Paperless**

Combining Wireless & Other Continuous Improvement Methods to Increase Service

- **Higher Service Levels = Customer Satisfiers**
  - ✓ **More accurate inventory**
  - ✓ **Fewer stock-outs**
  - ✓ **Faster cycle times**
  - ✓ **Invest time saved in higher service levels**
    - ➢ **Kitting & Project bundling**
      - **Stock**
      - **Non-Stock**
      - **Project (both stock & non-stock)**
    - ➢ **Staging**
    - ➢ **Site deliveries**

Project Considerations & Preparation

- Define needs, functionality & costs/benefits
- Select
  - ✓ Bar code style
  - ✓ Mobile Devices
  - ✓ Software (functionality & compatibility)
  - ✓ Printers
- Label considerations
  - ✓ Format
  - ✓ Environment, lighting, sizes, visibility, adhesion, label locations (racking bins, etc.)
  - ✓ Media based on application, etc.
  - ✓ Thermal, laser, etc.
  - ✓ Sizes based on label needs & productivity
- Plan, Discuss, Test, Test, Test

Bar Code Types

One-Dimensional (1D) Barcode Types

One-dimensional, or 1D barcodes, systematically represent data by varying the widths and spacings of parallel lines, and may be referred to as linear or one-dimensional. These include some of the traditional, or most well recognized barcode types such as the UPC and EAN code types. Example: Common UPC format used in retail.

Two-Dimensional (2D) Barcode Types

Two-dimensional, or 2D barcodes, systematically represent data using two-dimensional symbols and shapes. They are similar to a linear 1D barcode, but can represent more data per unit area. These include some newer barcode types such as the QR Code and PDF417 code types. Example: QR Code used in retail, Entertainment & advertising.

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One Dimensional Bar Codes

CODE 39

Code39 barcodes (or Code 3 of 9) are used to label goods across many industries, and are often found in the automotive industry and the US department of Defense. It allows the use of both digits and characters, and its name originates in the fact that it could only encode 39 characters—though in its most recent version the character set has been increased to 43. It's similar to, but not as compact as, the Code 128 barcode, which we'll talk about next.

Industry: Automotive and Defense

CODE 128

Code 128 barcodes are compact, high-density codes used in logistics and transportation industries for ordering and distribution. They're geared toward non-POS products, like when supply chain applications label units with serial shipping container codes (SSCC). Code 128 barcodes are powerful and can store diversified information because they support any character of the ASCII 128 character set.

Industry: Supply Chain

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Bar Code & Label Considerations

- Where & how the material will be scanned?
- Which character set needs to be supported?
  - ✓ Alphanumeric characters?
    - Code39, Code128, or QR Code.
- How much space is available on the product packaging?
  - ✓ EAN8, UPC-E, Code128 and Datamatrix offer smaller form factors.
- Which material will you print the barcode on?
  - ✓ ITF is great for printing barcodes on corrugated cardboard. Placing labels on tags is an option.
- Which barcode type supports the largest amounts of data?
  - ✓ PDF417 codes are great for storing huge amounts of data.

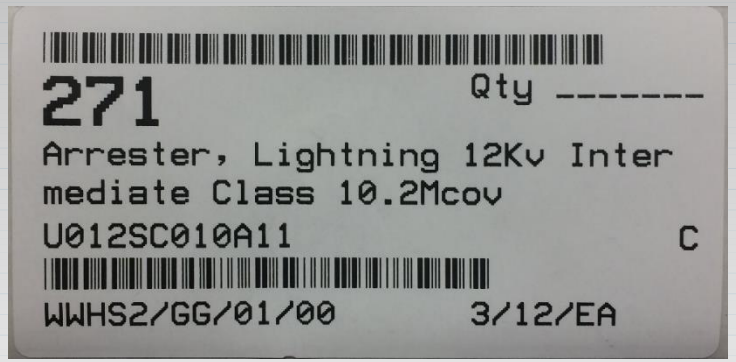
Barcode Label Information

- Select bar code style – EKPC uses 128
- Select Label(s) Size(s) & Media for application(s)
- Label content & formatting
  - ✓ Item stock I.D.
  - ✓ Item description
  - ✓ Item Mfr. PN
  - ✓ Item A,B,C code
  - ✓ Item location
  - ✓ Item Min/Max level
  - ✓ Item Unit of Measure

Barcode Label Types

Beam Label

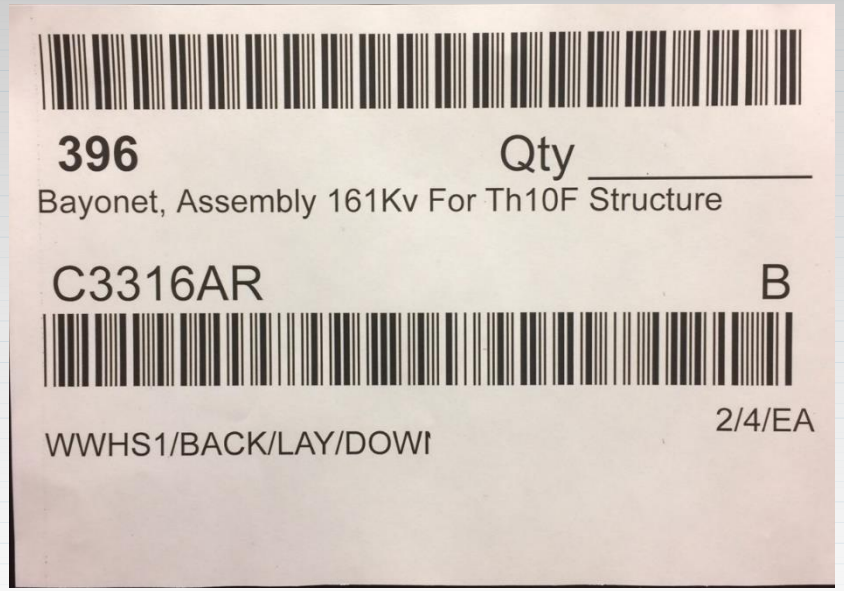
2in X 4in



Note:
Outdoor media can be used alone or with sleeves to protect against ultraviolet rays and moisture

Bulk Stack Label

6in X 8.5 in



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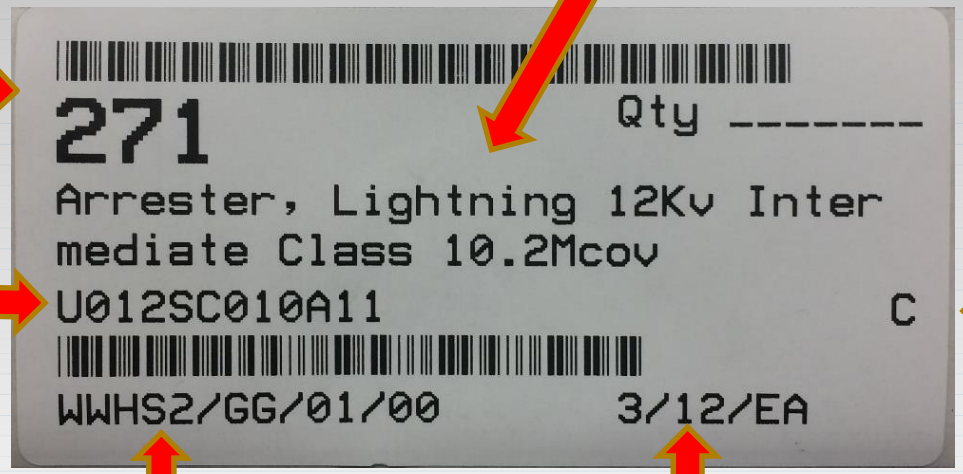
Barcode Label Format



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Mobile Devices

iPod Touch

Android Zebra

Motorola Scanner

Printers

Zebra Printer

- Compact (can wear on belt)
- Mobile
- Durable
- Wireless/ Bluetooth
- Universal for all warehouses

Laser Printer

- For larger (1/2 & full page) labels

Kitting

- Vendor prepackages
- More efficient ordering receiving and issuing handling & managing
- Customer convenience
- Easy to identify
- Improved processing

9 Items condensed in to one label.

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Questions & Discussion

Thank you, from your Friends at EKPC

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