



## **Requirements for Wired and Wireless Bar Code Scanners Used with Clinical Applications**

U.S. Department of Veterans Affairs  
Veterans Health Administration  
Office of Informatics and Analytics  
Health Informatics  
Bar Code Resource Office

as of December 17, 2014

VA Wireless Bar Code Scanner Requirements			
Reference Number	Requirement	Mandatory	Desireable
1	Scanner shall be compliant with FIPS 140-2	Y	
2	Scanner shall not require additional external hardware to meet FIPS compliance	Y	
3	Scanner shall support a camera based area imager with a 2D imager engine bar code scanner	Y	
4	Scanner shall support one dimensional and two dimensional bar code capability	Y	
5	Scanner shall read all symbologies used for ISBT 128 blood bank standards	Y	
6	Scanner shall read all GS-1 standard bar code symbologies to include linear and GS-1 DataBar	Y	
7	Scanner shall be configurable to enable and disable the ability to read the composite portion of the GS-1 DataBar symbology	Y	
8	Scanner shall be pre-programmed to VA BCMA Defaults (scannable set-up "cheat sheet" is acceptable) (See Tab Below)	Y	
9	Scanner shall allow firmware upgrades to be installed in the field	Y	
10	Scanner firmware shall be backward and forward compatible	Y	
11	Scanner shall support omnidirectional scanning	Y	
12	Scanner shall support a minimum focal distance of not less than 3 inches	Y	
13	Scanner shall support scan area illumination providing visibility of the area being scanned	Y	
14	Scanner shall have an optional hands-free mode		Y
15	Scanner shall support audible alerts that are adjustable by the end user	Y	
16	Scanner shall provide an audio or visual low battery alert/indicator	Y	
17	Scanner handset shall weigh less than 16 oz	Y	
18	Scanner shall have a transmission range of not less than 20 feet to base station	Y	
19	Scanner shall continue to function after a minimum 4 foot drop to concrete	Y	
20	Scanner shall have an IP seal rating greater than 40	Y	

21	Scanner housing shall be constructed of or coated with health care grade plastic (antimicrobial and/or disinfectable with hospital grade cleaners)	Y	
22	Scanner base station shall connect using a standard USB interface	Y	
23	Base station shall use "power over USB" for charging scanner and communication (i.e. shall not require separate power source)	Y	
24	Scanner shall be charged without removing batteries		Y
25	Scanner shall have a one piece pistol grip (i.e. pistol grip is not a separate piece/accessory)	Y	
26	Scanner retains settings after power interruption	Y	
27	Scanner battery life shall exceed 2000 recharge cycles	Y	
28	Scanner battery shall not develop charge memory	Y	
29	Scanner battery recharging time shall be less than 3 hours	Y	
30	Scanner shall not require tools to replace batteries	Y	
31	Warranty 3 years or more		Y
32	Vendor provides 24/7 customer support during warranty period		Y
33	Vendor/manufacturer provides customer notification of identified problems		Y
34	Vendor provides firmware upgrades at no cost during warranty period	Y	

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12	Scanner shall have an optional hands-free mode		Y
13	Scanner shall support audible alerts that are adjustable by the end user	Y	
14	Scanner handset shall weigh less than 10 oz	Y	
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18	Scanner shall connect using a standard USB interface	Y	
19	Scanner shall be a one piece pistol grip (i.e. pistol grip is not a separate piece/accessory)	Y	
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## Food for Thought (Wired & Wireless)

The following are considerations related to the implementation of this TRM.  
Please carefully review the information.

1	Hands free mode requires the scanner to use some sort of mount or base station to keep the scanner in the upright scanning position. The base or mount may need to be purchased separately.
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## **VA BCMA Default Settings for Bar Code Scanners**

- Automatic carriage return is enabled
- Scanner beep volume is set to medium
- Ability for scanner to read the composite portion of GS1 Databar symbology is disabled by default
- Scanner is pre-programmed to read all common 1D and 2D symbologies, for example:
  - 1D:
    - Code 128
    - Code 39
    - Interleaved 2 of 5
    - UPC
    - Codabar
    - ISBT 128
  - 2D
    - Aztec
    - DataMatix
    - PDF417
    - RSS/GS1 Databar