

## Functional Requirements for **Portable Digital X-ray System**

### **Technical Requirements:**

#### **Portable System Requirements:**

1. 30 kW generator or similar with High Frequency
2. Grid available in both portrait and landscape
3. On-board image display
4. Patient alignment system (laser alignment/positioning lights)
5. Integrated structured DICOM dose reporting
6. Reject/Repeat Analysis Software
7. Battery operated and has a motorized drive
8. Ability to move portable unit from tube head/extension arm
9. Minimum 270 degree tube rotation in both directions
10. Programmable IP destinations for images to be sent
11. kV range: 35-125kV in steps of 1kV or similar
12. mAs range: 0.1-400mAs or similar
13. Tube max 125 kVp
14. The preferred Operating System is Windows 7
15. Computer hard disk 300 GB or greater
16. Image Storage
17. Worklist from RIS to be available at point of care
18. Wireless – compatible with 802.11g
19. Provide DICOM Conformance Statement
20. FIPS 140-2 compliant
21. LAN connection– (as backup)
22. Individual user logins
  - 22.1. Report information will include username of person logged in.
23. Warranty – minimum 1 year
24. If Windows is loaded on a workstation, it must be Windows 7 or latest version

#### **Optional Items**

1. Wireless exposure switch that can be operated remotely
2. Pre-programmed exposure settings
3. On-board user monitor with pop up keyboard
4. Extended 6 months warranty

#### **Detector Requirements:**

1. Resolution – minimum 2.0 lp/mm

2. Weight Limit (w/battery installed) – maximum 12.5 lbs
3. Wireless (not tethered to the system/table)
4. Provide maximum patient weight (in lbs) for weight bearing examinations
  - 4.1. Minimum weight will be 150 lbs
5. Provide what full coverage warranty covers for a minimum of one year
6. Provide maintenance requirements and drop policy (post warranty)

### **Training**

1. On-site applications during GO LIVE – Minimum 24 hours
2. On-sit applications follow-up training – Minimum 24 hours
3. One Biomedical technician training- tuition, lodging, and travel

### **Optional Training Items**

1. All prerequisite courses are including in the training costs.

### **Support and other Documentation to Provide:**

1. Provide DICOM Conformance Statement
2. Provide completed Pre-procurement Assessment form (6550) and MDS<sup>2</sup> document
3. Provide information about your companies support structure during the warranty period (i.e. a listing of Field Service Engineer locations and availability, support 800 phone number(s), remote support, etc.)
4. Please provide version/platform long-range plan
5. Two complete sets of the operator and maintenance manuals
  - 5.1. One set of each must be hardcopy and the other set must be on a DVD/CD

### **Trade In**

1. None