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| **Item 1** | **Digital Mobile C-Arm Fluoroscopy Unit**  | **Qty. (1)** |

**IMPORTANT NOTE**:

*Vendors are required to fill out the product details, compliance information, and brochure reference page number in the columns below*

**TECHNICAL SPECIFICATIONS:**

The unit must meet or exceed the requirements listed in the table below.

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| --- |
| **Product Details** |
| Name of Manufacturer |  |
| Model/ catalogue number |  |
| Country of Origin for the offered model |  |
| Country where the manufacturer is based |  |
| Delivery time |  |
| Full warranty period |  |

|  | **Minimum Requirements** | **Compliance )Y/N)**  | ***Brochure Page No.*** |
| --- | --- | --- | --- |
| **\*** | A state of the art digital Mobile C-Arm fluoroscopy system is required to provide excellent image quality and minimal doseof radiation to a void awide range of applications. The system must comprise sufficiently sophisticated hardware and software , specially an advanced vascular software, platforms to be able to host a wide range of real-time and post processing image enhancement techniques, the system must meet or transcend the following specifications: |  |  |
| **1** | **Application:**Orthopaedics,interventional procedures. Vascular surgery; Angiography and DSA |  |  |
| **2** | Physical Configuration: Two wheeled units with smooth manual steering system: one supporting the C-Arm and console and the other supporting monitors, image processing, recording devices etc. |  |  |
| **3** | System backbone: Microprocessor control over all subsystems with an elaborate self-test and error code scheme. |  |  |
| **4** | **Control Console:** hygienic touch type controls with easy to read, user friendly annotation. |  |  |
| **5** | **Single -Head Injector (TO BE PRICED SEPARATLY)** * Floor, mobile microprocessor controlled, programmable, high capacity, power contrast medium injector for angiography use.
* Control from OR room unit, screen size ~8” or larger
* Maximum syringe capacity: Please specify
* Volume & increments for each syringe: Please specify
* Flow rate & increments: Please specify
* Programmable protocols
* Maximum Pressure: ~ 325 psi
* Offers **must** include a priced full list of compatible consumables.
 |  |  |
| **6** | **X-Ray Tube:**  |  |  |
| **A** | Rotating anode type. |  |  |
| **B** |  Anode heat Capacity, kHU: ≥ 300. |  |  |
| **C** | Anode cooling, kHU/min:≥ 50. |  |  |
| **D** | Dual focus, size: ≤ 0.6 each. |  |  |
| **7** | **X-Ray Generator:** |  |  |
| **A** | Ripple-free high-frequency converter type. |  |  |
| **B** | Power rating, kW@100 kVp: ≥ 15 kW. |  |  |
| **C** |  **Radiographic Mode:** |  |  |
| kV range: ~ 40 to 120 kV in steps of 1 kV. |  |  |
| mAs range: ~ 3.2 to 70. |  |  |
| AEC |  |  |
| **D** | **Fluoroscopic Mode:** |  |  |
| kV range: ~ 40 to 110 kV.  |  |  |
| mA range: ~ 10 to 60 mA. |  |  |
| Pulsed fluoroscopy: ~ 1 to 25 pulses per sec. |  |  |
| Digital Snapshot mode  |  |  |
| **7** | **Flat Panel Detector (Size ≥ 28 cm** x **26 cm*)*** |  |  |
| **8** | **TV Monitor:** |  |  |
| **A** | Dual display high-resolution coloured LCD monitors or one high resolution monitor (30") with dual display .  |  |  |
| **B** | Monitor size: ≥ 18". |  |  |
| **9** | **Image Acquisition:** |  |  |
| **A** | Image matrix: ~ 1024x1024. |  |  |
| **B** | Collimation: Dual Leaf and Iris type. |  |  |
| **C** |  Image reversal and rotation capability. |  |  |
| **D** | Magnification (detector zoom) |  |  |
| **10** | **Image Processing and Storage:** |  |  |
| **A** | Image storage matrix: ~ 1024x1024. |  |  |
| **B** |  Patient data registration system. |  |  |
| **C** |  Last image hold. |  |  |
| **D** |  Cine replay. |  |  |
| **E** | Digital subtraction. |  |  |
| **F** | USB& CD/DVD R archiving or USB archiving only is accepted |  |  |
| **G** | Full **DICOM 3.0** connectivity. |  |  |
| **H** | * Kindly quote for all available software packages (e.g. DSA, Roadmap, Zoom, Image enhancement, dedicated advanced vascular package (annotation & measurement, calibration, distance, angle stenosis, digital marking on screen. dedicated Ortho Package…. etc.), and all hard copy devices.
* Land marking, image opacification maximization, co2 angiography compatibility, injector synchronization, AutoSave option.
* Low radiation dose option.
 |  |  |
| **I** | An integrated laser light localizer, radiation free collimation and multi-level dose control (manual & automatic adjustment (if available)) |  |  |
| **J** | Storage capacity, image ≥ 30000 image |  |  |
| **11** | C-Arm: |  |  |
| **A** | Free Space: ≥ ≈ 70cm. |  |  |
| **B** | Depth: ≥ ≈ 60cm. |  |  |
| **C** | Vertical Travel: ≥ ≈ 40cm. |  |  |
| **D** | Orbital and pivot Rotation, Horizontal and panning motion, and reverse position. |  |  |
| **12** | A list of standard accessories for the offered model (optional). |  |  |
| **13** | **Service training for one biomedical engineers/technicians as per item 20 of the special terms.** |  |  |
| **14** | ***Contract For the C-Arm, must include the price for a comprehensive service contract (including all replacement parts and x-ray tubes) valid for a period of (8) years starting at the end of the 24 month warranty period. The price of the contract will be evaluated together with the price of the equipment.*** |  |  |

***SPECIAL TERMS***

* ***Offers not complying with any of the special terms or the technical specifications shall be considered non-conforming with tender requirements.***
* ***Any vendor providing FORGED documents shall be disqualified from the current tender and banned from participating in any future RMS tenders.***
1. ***All equipment must be the most recently released model/version which is equal to or higher than the range of the specifications of the required system (low, mid or high) and equal to or higher than the level of technology and required options mentioned in the technical specifications.***
2. ***Required certificates:***
3. ***For equipment of US origin, a copy of a certificate of FDA approval & the relevant 510K clearance for selling to US healthcare facilities for the offered model must be submitted with the technical offer.***
4. ***For equipment of other origins, a copy of either a CE certificate with the relevant CE number (MDD)/TÜV/BSI/UL OR a certificate of FDA approval & the relevant 510K clearance for selling to US healthcare facilities for the offered model must be submitted with the technical offer.***
5. ***Only for class Ι medical equipment, submission of a copy of Declaration of Conformity certificate (MDD) for the offered model shall be accepted.***
6. ***With each offer, bidders must provide a formally endorsed document issued by the manufacturer stating that the bidder is the sole certified agent / distributor for the offered item.***
7. ***In all of the above cases (except 2.4) certificates must be formally endorsed by JFDA.***
8. ***Country of origin:***
	1. ***The country of origin of the equipment must be one of the following:***

***USA, Canada, Japan, UK, Sweden, Finland, Denmark, Switzerland, Belgium, Germany, France, Netherlands, Spain, Norway, Italy, Ireland, Austria, New Zealand, Australia &Czech Republic.***

* 1. ***Accessories and consumables may be manufactured in other countries and/or by different manufacturers.***
	2. ***All offered items must be approved for sale in the same country of origin. An original and officially endorsed free-sale certificate from an authorised body must be included in the offer.***
	3. ***Vendors must specify the country of origin of all offered items and accessories in the technical offer.***
	4. ***Except for equipment mentioned in (3.6) below, equipment manufactured by reputable companies based in any of the countries mentioned in (3.1) will be taken into consideration regardless of the manufacturing site only:***
	5. ***If they are approved for sale in the same county of origin (an original and officially endorsed free-sale certificate from an authorised body must be included in the offer.***

***OR***

* 1. ***If they are approved for sale in at least three of the countries mentioned in (3.1) (an original and officially endorsed free-sale certificate from an authorised body in those countries must be included in the offer).***
	2. ***For X-ray based equipment, MRI, and nuclear medicine systems, the following parts must be manufactured in one of the countries mentioned in 3.1 above.***
		1. ***X-ray tubes***
		2. ***X-ray generators***
		3. ***Flat panel detectors***
		4. ***Gantries (including detectors).***
		5. ***Image intensifiers***
		6. ***MRI Magnets***
		7. ***Gamma camera heads***
	3. ***Bidders must submit their reservations/queries regarding tender specifications and/or special terms within the first third of the tender closing period starting from the tender announcement date. Reservations/queries submitted after the end of this period shall be rejected.***
1. ***Warranty:***
	1. ***Offers must include a full warranty including spare parts and labour for a period of a minimum of 24 months from the date of installation.***
	2. ***If at any time during the warranty period the item becomes inoperative due to a technical fault the item must then be repaired by the supplier /local agent within a period of fourteen days from written notification, otherwise the supplier must replace the item with a new identical functioning one and will endure a penalty determined by the Royal Medical Services for each day of the downtime of the system. In case the item was replaced by a new one, the warranty period mentioned in (4.1.) above will start from the installation and commissioning date of the new item.***
2. ***One set of operation manual(s) and one set of service manual(s) including schematics and a spare-part list must be delivered with each unit, CD/DVD is acceptable. For large tenders, a certain agreed percentage of manuals per item may be agreed upon.***
3. ***Where applicable, pre-installation shall be the sole responsibility of the supplier. Pre-installation shall include removal of old system(s), any civil work, electrical work or site modification(s) necessary to accommodate the new system(s) according to manufacturers’ specifications and safety standards in addition to the work required for bringing back the site to the same working conditions as before installing the new system(s).***
4. ***Power requirements: where applicable either single phase 220V, 50Hz or 3-phase 380V. Systems with external transformers are considered conforming only if clearly stated in the technical specifications.***
5. ***Technical offers must include clear original technical brochures/catalogues for all offered items.***
6. ***Offers must include fully detailed technical offers and compliance sheets as a soft copy ( either Microsoft office or Microsoft excel format) in addition to a hard copy, mentioning the exact model/catalogue number and country of origin of the offered item(s), full technical description/specifications and any accessories or options included in the offer.***
7. ***Compliance sheets must be as per the tabular format of the technical specifications in the tender documents, listing the required specifications on one column and a Yes or NO response to each point in the adjacent column, with reference to page and line numbers in the relevant technical brochure. Offers not complying with this term shall be rejected.***
8. ***Accessories and consumables:***
	1. ***Any accessories and consumable items necessary to operate the offered system must be clearly identified and priced separately.***
	2. ***Technical offers must include a priced list for accessories and consumables as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) with prices fixed for a period of five years from the date of installation and commissioning with a maximum annual increase of 2%, any essential item not listed will be considered free of charge.***
	3. ***Accessories and consumables must be priced according to their delivery destination either to QueenAliaInternationalAirport or to RMS Main Medical Stores.***
	4. ***Where applicable, a start-up kit of accessories and consumable items must be provided with each system on a free-of-charge basis.***
9. ***Spare Parts:***
	1. ***Technical offers must include a comprehensive and priced spare parts list as a hard copy in addition to a soft copy (either Microsoft office or Microsoft excel format) valid for a minimum period of five years with a maximum annual increase of 2%, commencing at the end date of the warranty period, any essential item not listed will be considered free of charge.***
	2. ***Spare parts must be priced according to their delivery destination either to QueenAliaInternationalAirport or to RMS Main Medical Stores.***
10. ***Spare parts, consumables and accessories availability must be guaranteed for a minimum period of ten years starting from the date of installation and commissioning.***
11. ***Tender Awards:***
	1. ***For the final list of offers having a chance of winning the award, the awarding process shall be based on the accumulative value of both the offered item and its’ running cost (Total Cost of Ownership) over a period of seven years from the date of installation and commissioning. Only offers with the lowest total***
	2. ***cost of ownership over a period of seven years from the date of installation and commissioning shall qualify for the award.***
	3. ***Running cost includes the value of consumables, accessories needed to operate the system over the same period as well as the cost of any service contract (where applicable).***
12. ***For PC/Laptop based systems:***
	1. ***Complete restoration medium (CD/DVD/etc.) of the operating system and the application software must be supplied.***
	2. ***Where locally supplied computers or laptops are offered, only computers/laptops from Apple, hp/Compaq, Lenovo, Dell, fujtisu or Toshiba will be accepted, offered models must be the latest available version upon delivery.***
	3. ***Where locally supplied printers are offered only the following types and brands are accepted: HP, SAMSUNG, OKI, CANON, EPSON.***
13. ***Pricing must include services of sale, shipment, transportation, delivery from port to site or to Main Medical Stores, installation, pre-installation (if needed), training, commissioning, warranty and bringing the equipment into service.***
14. ***Custom clearance of goods shall be the responsibility of the Jordanian Armed Forces (JAF), however, suppliers shall bear all costs incurred by handling charges and any demurrage charges or extra expenses incurred by the port’s corporation (including expenses caused by delay in presenting the necessary shipment documents for either clearing or transporting the goods to the required location mentioned in the final order, delivery note issuing charges, unloading charges, local shipping charges etc.). The supplier is also responsible for providing of all relevant shipping documents, together with the delivery order(s).***
15. ***DRMS has the right to increase or decrease the awarded quantities by a percentage not exceeding 30% after the final order notification with the same prices, terms and conditions of the original contract upon DRMS request and approval of the awarded party.***
16. ***The supplier must furnish DRMS with a guarantee stamped and legalized by the Notary Public equals to (115%) of the total value of the awarded equipment valid for twelvemonths from the date of final acceptance of the equipment by DRMS.***
17. ***Training: Offers must include on-site user and service training.***