

कोहलपुरनगरपालिका नगरकार्यपालिकाकोकार्यालय कोहलपुर, बाँके सुम्बिनी प्रदेश

फोननं. ०८१२४०००९ ०८१४४२२९०

क्याटलग बिधिबाट X- ray Machine 300 mA with CR system खरिद गर्ने बारेको सुचना । प्रथम पटक प्रकाशित मितिः २०७८/०६/१४

यस नगरपालिका द्वारा संचालित अस्पताललाई आवश्यक पर्ने X- ray Machine सार्वजिनक खरिद ऐन, २०६३) संशोधन २०७३ (को दफा द को उपदफा(१क)(८) तथा सार्वजिनक खरिद नियमावली, २०६४) दशौँ संसोधन २०७७ (को नियम ३१ख बमोजिम त्यस्तो X- ray Machine को उत्पादक (Manufacturer) कम्पनी वा सो को आधिकारिक बिकेता (Importer) हरु बिच मात्र प्रतिस्पर्धा गराउने क्याटलक) सिपंड बिधिबाट खरिद गर्नुपर्ने भएकोले सार्वजिनक खरिद नियमावली (२०६४ को नियम ३१ ख को उपनियम २ अनुसार उल्लेखित X- ray Machine बिकी गर्न चाहने उत्पादक (Manufacturer) तथा आधिकारिक बिकेता (Importer) ले आ-आफ्नो उत्पादनको आधिकारिक स्पेसिफिकेशन, गुणस्तर, मुल्य र सुविधा सिहतको विवरण तथा (क्याटलग वा ब्रोसर) Manufacturer's Authorization Letter समेत संलग्न राखि यो सुचना प्रकाशित भएको मितिले (१०) दश दिन भित्र यस कार्यालयमा निवेदन दर्ता गर्न हुन सम्बन्धित उत्पादक (Manufacturer) वा आधिकारिक बिकेता (Importer) को जानकारीको लागि यो सुचना प्रकाशित गरिएको छ । पुनश्चः स्पेशिफिकेशन तथा अन्य थप जानकारीको लागि यस नगरपालिकाको website: www.kohalpurmun.gov.np वा मो.नं. ९८४०१५१००७ मा सम्पर्क गर्नुहुन अनुरोधि छ ।

प्रमुख प्रशासकीय अधिकृत

S No.	Purchaser's Specifications
	X-ray Machine 300mA
	Manufacturer
	Brand
	Type/Model
	Country of Origin
1	Description of Functions
1.1	A general X-ray machine 300mA with fixed height table.
2	Operational Requirements
2.1	It shall be suitable to be used for adult and paediatric patients in general radiography examination and it shall operate on single phase AC power supply or three phase AC power supply.
3	System Configurations
3.1	X-ray Generator, 1unit.
3.2	Control Console, Iunit.
3.3	Radiography patient table, 1unit.
3.4	Floor mounted bucky stand, 1 unit.
3.5	Floor mounted tube stand & X-ray tube, 1unit.
3.6	Bidder shall indicate brand and model information here and provide technical data document for all major components specified above.
4	Technical Specifications
4.1	X-ray Generator
4.2	Microprocessor based, high frequency inverter generator, the generator shall have at least 40KHz.
4.3	Generator output: not less than 30 KW.
4.4	Radiographic voltage range: 40 - 125KV with 1KV adjustment.
4.5	Radiographic mA: 10 - 300mA in 10 steps.
4.6	mAs range: 0.01 - 500 mAs.
4.7	Radiographic timing: min. 0.001sec (1msec).
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4.8	Anatomical Programmable Radiographic mode shall be available.
4.8	Anatomical Programmable Radiographic mode shall be available. Automatic Exposure Control shall be available.
	Automatic Exposure Control shall be available. Overload protection device shall be provided.
4.9	Automatic Exposure Control shall be available. Overload protection device shall be provided.
4.9 4.10	Automatic Exposure Control shall be available.
4.9 4.10 4.11	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz.
4.9 4.10 4.11 4.12	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°.
4.9 4.10 4.11 4.12 4.13	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube
4.9 4.10 4.11 4.12 4.13 4.14 4.15	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°. Large focus not more than 1.2 mm.
4.9 4.10 4.11 4.12 4.13 4.14 4.15 4.16	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°. Large focus not more than 1.2 mm. Small focus not more than 0.6 mm. Maximum tube voltage 125 KV. Maximum tube output shall match with the generator output
4.9 4.10 4.11 4.12 4.13 4.14 4.15 4.16	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°. Large focus not more than 1.2 mm. Small focus not more than 0.6 mm. Maximum tube voltage 125 KV. Maximum tube output shall match with the generator output of not less than 30 KW. Filtration: min 2.5mm Al equivalent.
4.9 4.10 4.11 4.12 4.13 4.14 4.15 4.16 4.17 4.18	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°. Large focus not more than 1.2 mm. Small focus not more than 0.6 mm. Maximum tube voltage 125 KV. Maximum tube output shall match with the generator output of not less than 30 KW. Filtration: min 2.5mm Al equivalent. Cooling method passive or forced air and/or oil cooling.
4.9 4.10 4.11 4.12 4.13 4.14 4.15 4.16 4.17 4.18 4.19	Automatic Exposure Control shall be available. Overload protection device shall be provided. Power supply: Single phase 220-240V 50/60Hz or 3 phase, 380-415V 50/60Hz. X-Ray Tube X-ray tube rotating: +/-120°. Large focus not more than 1.2 mm. Small focus not more than 0.6 mm. Maximum tube voltage 125 KV. Maximum tube output shall match with the generator output of not less than 30 KW. Filtration: min 2.5mm Al equivalent.

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S No.	Purchaser's Specifications
4.22	Radiography table shall be fixed height, 4-way floating top type with foot switch control.
4.23	Come with grid and cassette tray, with grid ratio: not less than 12:1. Grid line number: 40 line/cm. Focus distance: 115cm.
4.24	Cassette size: accept all sizes from cassette 13x18 cm to 35x43 cm type.
4.25	Table top to film distance: approx. 7cm.
4.26	Table top transverse movement : approx. ±14cm.
4.27	Table longitudinal movement: approx. ± 29cm.
4.28	Table top dimension: approx. 2000 mm x 800 mm.
4.29	Table movement arrested by electromagnetic brakes.
4.30	Floor Mounted Bucky Stand
4.31	Vertical travel: from in the range 460-1700mm.
4.32	Moving Grid with Grid ratio not less than 12:1. Grid line number: 40 lines/cm.
4.33	Movement arrested by electromagnetic brakes.
4.34	Floor Mounted Tube Stand
4.35	Longitudinal travel: approx. 1750mm.
4.36	Vertical travel: from in the range 630 -1850mm.
4.37	Movement arrested by electromagnetic brakes.
4.38	Rotation of tube arm around vertical axis: 180° ; lockable at 0° to +/- 90° .
4.39	Collimator
4.40	Manually adjustable.
4.41	Manually selectable filters.
4.42	Light localizer, lamp with timer.
4.43	Built-in light switch should be provided.
4.44	Turning angle should be min +/- 45 degree.
4.45 4.46	Halogen lamp.
	Control Console
4.47	Digital Display.
1.48	Minimum 3 Point Exposure Technique.
1.49	Status display, error display.
	Accessories, Spare Parts and Consumables
5.1	Accessories: • Lead apron-01 no.
5.2	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).
5	Operating Environment
5.1	The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.
5.2	Power supply: 220 – 240 VAC, 50Hz Single Phase or 380-415VAC 3 phase 50Hz fitted with appropriate plug for X-ray generator fitted with appropriate plug for other units. The power
	cable must be at least 3 metres in length.
	Standards & Safety Requirements
.1	Must submit ISO13485:2003/AC:2007 for Medical Devices AND
.2	CE (93/42 EEC Directives) or USFDA approved product certificate.

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S No.	Purchaser's Specifications
7.3	Shall meet: IEC 60601-1-3 - Part 1: General Requirements for safety - Collateral Standard: General Requirements for Radiation Protection in Diagnostic X-Ray Equipment. IEC 60601-2-7 - Part 2-7: Particular Requirements for the Safety of High-Voltage Generators of Diagnostic X-Ray Generators.
8	User Training:
8.1	The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users.
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	During warranty period supplier must ensure preventive maintenance & corrective/breakdown maintenance whenever required.
11	Installation and Commissioning
11.1	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
12	Documentation Documentation
12.1	User (Operating) manual in English.
12.2	Service (Technical / Maintenance) manual in English.
12.3	List of important spare parts and accessories with their part numbers and costing.
12.4	Certificate of calibration and inspection from factory.

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S.N.	Purchaser's Specifications
	line/cm.
4.40	
4.40	Cassette size: accept all sizes up to 35x43 cm type.
4.41	Table movement arrested by electromagnetic brakes.
VI	Shall come with Automatic Exposure Control (AEC).
4.43	Floor Mounted Bucky Stand:
4.44	Vertical travel: from in the range 460-1700mm.
4.44	Moving Grid with Grid ratio not less than 10:1. Grid line number: 40 lines/cm.
4.46	Shall come with Automatic Exposure Control.
4.47	Cassette size: accept all sizes from 5"x7" to 14"x17". Movement arrested by electromagnetic brakes.
VII	CR System:
4.48	Image Reader:
	Cassette Mechanism to load and unload IP.
	 Scanning mechanism to read, erase and process the images from the imaging plate. (IP) Including auto routing newly acquired images to desired preview monitor.
	IP processing rate> 50 plates/hr.
	Panel for indicating online status of the CR Reader in case of machine malfunction.
	Emergency Mode for accepting exposed cassettes without patient demographics for accepting the constant of the CR Reader III case of machine malfunction.
	casualty trauma workflow requirements.
	Capability of retrieving at least 10 scanned images and quick check of the exam data
	and the image of at least the last four cassettes scanned at the X-Ray room.
	• Verification of the connectivity status of configured image destination.
	Spatial resolution of digital image 6-10 pixels/mm
	 Scanning resolution for all the IP Plates must be specified in the quote.
	• Must enable 12 bit images.
	 X-Ray Generator compatibility with reputed manufacturers.
	 Image matrix at standard resolution (14 x 17) - 2000 x 2500 Row x Column
4.40	• Image matrix at standard resolution (14 x 17) - 3000 x 4000 Row x Column
4.49	CR Workstation:
	• Capable of Achieving and printing selected images to a standard DICOM destination in
	DICOM 5.0 Ioiliat.
	Storing images in the local disk for predefined period. Mochaniem for a second disk for predefined period.
	Mechanism for accepting new images when the local disc is full. Sorting of notices in the local disc is full.
	 Sorting of patient image based on name, date, exam etc. Advance Processing Software.
	Using predefined parameters or year defined to the state of the s
	bridge parameters of user defined and stored image parameters
	 Correcting typographical in patient demographic module, in case RIS connection was down and manual data entry was done.
	Capability of changing R/I Elipping Retation 7
	 Capability of changing R/L, Flipping, Rotating, Zooming, Collimating, annotating the incoming image.
	Multi-image and slide formats.
	Capability of storing in CD/DVD.
	Software for Advance Image processing, applications, display and quality monitoring.
	Connectivity and compatibility to communicate to RIS/HIS and DICOM Compatible
	devices such as MR/C1/DSA Work station,
	Must provide for HL-7 compatible interface. Output gray scale resolution 16 bits (i.e.)
.50	Output gray scale resolution- 16 bits/pixel. Remote ID and Preview station:
	Auto detection of cassette.
	Mechanism of writing /reading data on/from RF Tag.
	of writing reading data on/from RF Tag.

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S.N.	Purchaser's Specifications
	HIS/RIS/DICOM Compatibility.
	Preview scanned images on predefined preview terminal.
	Retrieving capacity of last 10 patients ID on the terminal.
	Identification of overexposure on preview module.
	Mechanism for user release in case of auto routing images to predefined DICOM destinations.
	destinations destinations
	System must be able to support minimum 5 review terminals
	• Preview display time < 45 sec.
4.51	Colour dry view imaging printer(film based) 1unit:
	Print Images from CR workstation. In DICOM 3 format.
	Mechanism to print images to 14x17 and 8x10 film sizes.
	Docked in processor.
	Resolution> 600 DPI.
	Multiple Image and slide printing capability.
	Shall be able to switch between Receiver Mode and Processor mode.
	Bidder shall indicate brand and model information here and provide technical data document for
HEE.	printer offered.
5	Accessories, Spare Parts and Consumables
5.1	Accessories:
	IP/Cassettes size:
	i- 35 cmx35 cm: 03
	ii-24cm x 30 cm:03
	iii-15 cmx 30 cm:03
	iv-20 cmx 25 cm:04
	v-25 cmx 30 cm:08
	 Lead apron, light weight-02 nos.
	Black and white laser jet printer for reporting:01
5.2	All standard accessories, consumables and parts required to operate the agriculture of the standard accessories.
	builded to be included in the co. D. 11
	specify the quantity of every item included in their offer (including items not specified above)
6	operating Environment
6.1	The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include B
	Par chaser's country. The conditions include Power Supply Climate Tomporeture
	ramalty, ctc.
6.2	Power supply: 380-415VAC 3 phase 50Hz fitted with appropriate plug for X-ray generator and
	- 10 The street of the street
5.3	
	UPS of suitable rating with voltage regulation and spike protection and maintenance free
7	Total So minutes backup shall be supplied
	Standards & Safety Requirements
1.1	Must submit ISO 13485:2003/AC: 2007 AND
.2	CE (93/42 EEC Directives) or USFDA approved product certificate.
.3	Shall meet:
	• IEC 60601-1-3 - Part 1: General Requirements for safety - Collateral Standard: General Requirements for Radiation Protection in Discourse V. P.
	The first to the factor of the first to the
	1EC 00001-2-7 - Part 2-7: Particular Requirements for the Safaty of II:-1, V-1
	Cenerators of Diagnostic A-Ray Generators.
	User Training
	The Cumplian shall the state of the Cumplian shall the state o
.1	The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the

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S.N.	Purchaser's Specifications
	equipment, as well as routine checks and maintenance expected by users.
9	Warranty
9.1	Comprehensive warranty for 2 years after acceptance.
10	Maintenance Service During Warranty Period
10.1	During warranty period supplier must ensure preventive maintenance & corrective/breakdown maintenance whenever required.
11	Installation and Commissioning
11.1	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
12	Documentation Documentation
12.1	User (Operating) manual in English.
12.2	Service (Technical / Maintenance) manual in English.
12.3	List of important spare parts and accessories with their part numbers and costing.
	- I the their part numbers and costing.

डा. परता परिवर्ती

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