

**TECHNICAL SPECIFICATIONS FOR A
CONVENTIONAL/INTRAORAL DENTAL X-RAY MACHINE
(Includes the supply, delivery, installation
and commissioning of unit)**

Application/Use

Dental radiography

Standard Composition

- X-ray Generator
- X-ray Tube Assembly
- Control Panel
- Exposure Switch
- Accessories
- Other Requirements
- Other Terms and Conditions

Technical Specifications

| | | | Bidder's Offer (Please check if available) |
|---|-----------------------------|--|--|
| <i>X-ray Generator</i> | Generator | High frequency inverter system | |
| | Tube Voltage | maximum of 70 kVp | |
| <i>X-ray Tube Assembly</i> | Power Source | Single phase, 220 VAC, 60 Hz | |
| | Effective focal spot size | 0.8mm x 0.8 mm or smaller | |
| | Total permanent filtration | Minimum of 1.5 mm Al equivalent | |
| | Beam defining device | Open-ended type | |
| | | With a plastic cone attached to its end | |
| | | Good for all intraoral film sizes | |
| | Focus-skin-distance | Minimum of 18 cm for operating voltage above 50 kV | |
| | | Minimum of 10 cm for equipment operating at 50 kV or below | |
| Useful x-ray beam size at the proximal skin surface | maximum of 7 cm in diameter | | |
| <i>Control Panel</i> | Exposure time | maximum of 5 seconds | |
| | Beam-on indicator | | |
| <i>Exposure switch</i> | Dead-man type | | |
| | At least 2 meters long | | |
| <i>Accessories</i> | Thyroid protective collar | 1 pc for the patient | |
| | | With at least 0.25 mm lead equivalence | |
| | Protective apron | 1 pc for the operator | |
| | | With at least 0.25 mm lead equivalence 100 cm long and 60 cm wide | |

| Other Requirements | To be checked by the bidder |
|--|------------------------------------|
| A split type, 3-ton capacity, 220 VAC, 60 Hz air-conditioning unit with automatic voltage stabilizer, 60 Hz, 170-260 V voltage range | |
| An automatic voltage stabilizer, 60 Hz, 170-260 V voltage range for the whole x-ray unit | |
| Two sets of the following: <ul style="list-style-type: none"> • service and installation manuals • operation and instruction manuals • wiring and schematic diagrams • parts listing • anode cooling chart • tube rating chart | |

| Other Terms and Conditions | To be checked by the bidder |
|---|------------------------------------|
| Two (2) years warranty for parts and service after passing the acceptance testing of the Radiation Health Service (RHS), Department of Health (DOH) | |
| Must comply with the applicable requirements under DOH Administrative Order (AO) No. 35, s. 1994 | |
| Bid offer is in Philippine peso to include taxes and duties; transportation to site, delivery, installation and testing expenses on site (hospital) | |
| Equipment must pass the acceptance testing of the RHS, DOH as provided in the DOH AO No. 21, s. 1996 dated 04 June 1996 | |
| Supplier must provide orientation training for users and maintenance personnel of the hospital | |
| Certification of manufacturer guaranteeing the availability of all spare parts for the next ten (10) years | |
| Inventory of spare parts for the unit/model offered duly signed by the principal | |
| Certification that the supplier has the capability for corrective and preventive maintenance of the unit | |
| Certificate/s of training for engineers/maintenance service personnel in model offered | |
| Certificate of sole distributorship from the unit manufacturer mentioning the name of the Philippine representative | |
| Certification of manufacturer guaranteeing delivery of equipment and all accessories | |
| Delivery together with the x-ray unit of the following: <ul style="list-style-type: none"> • One (1) pc circuit breaker • One (1) pc extension board for troubleshooting • Three (3) pcs per lamp for indicators of all x-ray parameters with pilot lamp | |
| The unit should conform to the International Electrotechnical Commission (IEC) standards or its equivalent | |
| Certificate of Philippine Securities and Exchange Commission (SEC) registration | |
| Certification of guaranteed uptime for the equipment offered | |
| The supplier must submit the original brochure. | |
| Supplier to submit cost of service contract for parts and labor after the warranty period | |
| Supplier must provide and install dedicated grounding system for the x-ray unit. | |
| Supplier must be accredited as a supplier of x-ray equipment by the DOH Accreditation Committee for Medical Equipment | |