

# VetiX P8

## VETERINARY DIGITAL RADIOGRAPHY SYSTEM

### Datasheet

## 1 THE GENERATOR

- The high-voltage generator with high-frequency, working frequency can be up to 45 kHz.
- High control precision in kV, mA real-time adjustment.
- Dedicated protection circuit, with complete protection method of: overheating protection, overcurrent protection, overvoltage protection, flint, tube hot-melt overload protection.
- Power: 8.0 kW
- Tube Current: 3.2 mA to 160 mA; higher mA reduces blur caused by organ motion, the chest X-ray examination is particularly advantageous.
- mAs: 0.1 mAs to 250 mAs
- Exposure time: 1 ms to 10000 ms
- Exposure voltage kV: 40 kV to 125 kV, increments: 1kV
- Power output combinations:
  - Combination at the maximum mA: 40 kV, 160 mA, 50 ms
  - Combination at the maximum kV: 125 kV, 40 mA, 40 ms
- Cooling method: natural cooling
- Exposure mode: Manual
- APR (Anatomical Program Radiography): 50 positions, fit for full-range of radiographic application
- Power Input: 200V-240V AC Single phase, 50/60Hz
- Support EU power cord
- Radiation dose display: on Workstation DROC user interface

## 2 X-RAY TUBE

- Enhanced anode heat dissipation, provided by high emittance coating and target design. Anode heat storage capacity is 30 kJ (42 kHU).
- Max anode heat dissipation rate: 250W (352HU/sec)
- Target angle: 25°
- Nominal focal spot: 2.6 mm
- Focus power: 8kW
- Max filament current: 4.5 A
- Filament voltage: 7.5 V to 8.5 V
- Cooling method: natural cooling
- Inherent filtration: 0.65 mmAl (75kV)
- Filament frequency: 0-22 kHz

## 3 FLAT PANEL DETECTOR

- DET-4336TT flat panel detector, slim and light-weighted design, it makes positioning and examination much easier.

- **Imaging Material: Amorphous silicon (a-Si) semiconductor with Cesium Iodide (CsI) scintillator**
- **DQE: 60% (0.5 lp/mm, RQA5)**
- **Pixel area (Effective Detector size): 430 mm × 360 mm**
- **Detector Thickness: 16.3±0.5mm**
- **Pixel size: 140 μm**
- **Pixel Matrix: 2496 × 3040 pixels**
- **Dynamic range: 16 bits**
- **Spatial Resolution: 3.4 lp/mm**
- **Imaging time of imaging system: 4.5s**
- **Preview time of imaging system: 3s**
- **Cooling Method: Natural cooling**
- **Surface bearing capacity:**
  - **Entire surface: 135 kg**
  - **Central 40 mm-diameter area: 100 kg**
- **Data transmission method: Ethernet**
- **Waterproof level IPX4**

#### **4 COLLIMATOR**

- **Manual collimator, and it is easy to operate with ergonomic design.**
- **Beam shape: rectangular**
- **Inherent filtration: 1.2 mmAl@75 kV**
- **Full field light localizer: LED light localizer**
- **Minimum radiation field: 0 cm × 0 cm at SID = 1000 mm**
- **Maximum radiation field: > 45 cm × 45 cm at SID = 1000 mm**
- **Collimator light: LED lamp (input power: DC/AC 12 V, LED 10W)**

#### **5 FRAME**

- **Column height: 1920 mm, with an error of ±5%**
- **SID: 1050 mm±5%**
- **Table dimension: 1200 mm × 650 mm, with an error of ±5%**
- **Table height: 730 mm, with an error of ±5%**
- **Table movement: Separable movement of the radiography table, with four casters that can be fixed**

#### **6 FUNCTION FEATURES**

- **Remote control radiance: 10 m**
- **Remote control functions: exposure**
- **User authorization different classes: Admin and User, using secret code to access**

## **7 ACQUISITION WORKSTATION**

- **Operation system: Windows 10**
- **CPU:  $\geq 1.4$  GHz**
- **Hard disk storage:  $\geq 500$  GB**
- **RAM memory:  $\geq 4$  GB**
- **Screen size: 23.8 inch**
- **Max. resolution:  $1920 \times 1080$**
- **Image processing system: DROC, network communication meets the DICOM 3.0 standard, achieving management over animals and images.**

### **7.1 DROC FUNCTION**

- **Animal registration**
- **Animal data edit, backup**
- **Expose parameter adjusting**
- **Image process**
- **Image view, backup**
- **Film print**

### **7.2 IMAGE REVIEW/NOTE FUNCTION**

- **Window width/level**
- **Crop**
- **Zoom**
- **Move**
- **Magnify**
- **Black and White Reverse**
- **Auto W/L In Rect**
- **Rotate**
- **Mirror**
- **Histogram**
- **Image Mark**
- **Measurements**
- **Last Shutter**

### **7.3 'LEVELS' ALGORITHM**

- **Detail enhancement**
- **Noise suppression**
- **Optimization curve regulation**
- **Tissue equalization**

## **7.4 NETWORK and DATA CONNECTION**

- LAN connection
- DICOM 3.0
  - DICOM Verification
  - DICOM Worklist
  - DICOM Storage
  - DICOM print

## **8 ENVIRONMENTAL CONDITIONS**

- Operating environment requirements
  - Relative humidity: 30% to 75% (no condensation)
  - Atmospheric pressure: 70 kPa to 106 kPa
  - Ambient temperature: 10°C to 40°C
- Transportation and storage conditions
  - Relative humidity: 30% to 93% (no condensation)
  - Atmospheric pressure: 70 kPa to 106 kPa
  - Ambient temperature: -20°C to 55°C

