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#### Optima XR220amx 30kW

Optima XR220amx Digital Mobile Radiographic system - with 30kW generator

The Optima XR220amx is a self-contained battery operated mobile radiographic digital X-Ray imaging system designed for performing radiographic exams at the point of care

#### Key Features

- 30kW generator
- Wireless Digital Detector with 6:1 removable grid, back-up tether, QAP (Quality Assurance Procedure)
- Dose Area Product Meter (DAP)
- Capable of 100-240V nominal, 50/60 Hz operation
- Stand-by mode to eliminate boot up cycles and allow exposure within 25 seconds
- Exposures can be taken and processed while the unit is charging
- Detector battery charges automatically while the detector is in the bin
- Optimized GUI - Technique, image acquisition and display tools in a single integrated user interface
- The detector can be used in additional wireless enabled GE radiographic systems: please refer to the current literature for system compatibility

#### Productivity

- Up to 1,200 w of power available to minimize charge time
- System can be driven within 4 seconds of activation
- Pre-programmed techniques per anatomy and patient size
- Systems can be used without the detector
- Modality Perform Procedure Step (MPPS; SPS/PPS configurable)
- Automated and customizable image transfer to PACS and printers
- Can reprocess images post acquisition and during an exam
- Usage reporting tools by individuals and user groups
- System Health dashboard for system status
- Bin stores detector and grid
- Built-in storage for cleaning wipes, gloves and lead apron
- Self-propelled single drive handle control with variable speed of up to 5 km/h (3.1 mph on flat surfaces) forward and reverse to automatically adjusts to the operator's pace

#### Wireless Digital Detector Specifications

- Detector battery can take up to 45 exposures per hour and provide enough power for 3

hours of use on a single charge

- Single panel (non-tiled) amorphous silicon detector with a Cesium Iodide scintillator
- Image area 40.4cm x 40.4cm (15.9in x 15.9in)
- Active matrix 2022 x 2022 pixels
- 8mb raw image file size
- Pixel Pitch 200 microns
- Typical upper dynamic range 7.8mR
- Typical DQE @ 0lp/mm: (68%)
- Two handgrips
- Dimensions: L 23.1in., H 17.8in.,  
T 0.94in. (L 580mm, H 452mm, T 24mm)
- Wireless point-to-point network between the system and detector for transferring image data
  - Communication over wide 500MHz channels to achieve very high data rates
  - Designed to co-exist with 802.11 networks without interference
  - Frequency: 3.1-10.6 GHz Max Power Output: -41.3 dBm
  - Max PHY Data rate: 480 Mbps
  - Effective Throughput: 30-70 Mbps Worklist can be retrieved from HIS/RIS systems and images can be transmitted through the DICOM interface to printers, archival devices (PACS) servers or review workstations
- RJ45 10/100/1000 Base T Ethernet port

Please refer to the DICOM conformance statement for complete definition of supported DICOM services.

#### Generator

- 300 mA maximum
- kVp and mAs controls
- Less than 2% low frequency ripple
- Frequency: greater than 100 kHz, super resonant inverter with varying frequency

#### X-ray Source

- Nominal Tube Voltage (radiographic) ~ 150kV
- Nominal Focal Spot size (IEC 60336)
  - Large Focus - 1.3 mm
  - Small Focus - 0.6 mm
- Anode Rotation Speed (minimal): 3200 min
- Permanent Filtration: 0.9 mm Al/75 kV IEC60522: 1999

- Maximum X-ray Tube Current
  - Large Focus: 500 mA
  - Small Focus: 200 mA
- Maximum Continuous Heat Dissipation: Without Air-circulator: 170W (238 HU/s)

#### Collimator

A pair of independent collimator blades control the X-ray field

- 180 lux (1000 Lumen/mt<sup>2</sup>) light field lamp
- The collimator rotates plus and minus 180 degrees with detents at -180, -90, 0, +90 and +180 degrees
- Full 43cm x 43cm (17 in.) coverage at a 100cm SID The column may be rotated up to plus or minus 270 degrees from the park position
- Drive Inhibit keypad access
- Password protected access to patient information for compliance with confidentiality regulations
- Automatic safety brake: Operator must hold drive handle to allow system movement
- Integrated front bumper stops unit and activates brakes when activated

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#### Wireless Connectivity

Wireless Connectivity for Optima XR220amx and Optima XR200amx

802.11 a/b/g n-compatible wireless connectivity to hospital network

#### Wi-Fi Certified

Compatible with:

- 802.11i, Wi-Fi Protected Access 2 (WPA2), WPA 802.1X
- AES - TKIP
- 64-, 128-WEP
- VPN: IPSec - IKE
- Management Frame Protection (MFP) EAP Types:
  - LEAP
  - LEAP + 128-WEP
  - LEAP + WPA
  - EAP - TLS
  - EAP-TTLS/MSCHAPv2
  - EAP-FAST
  - PEAP-GTC

- PEAP/MSCHAPV2

1 Auto Protocol Assist  
Auto Protocol Assist for Optima XR200amx and Optima XR220amx

1 Repeat/Reject Analysis  
Repeat/Reject Analysis for Optima XR220amx/Upgraded Optima XR200amx

1 Optima XR220amx Upgrade Training: 3 Days Onsite  
Optima XR220amx Upgrade Training: 3 Days Onsite (2 Days + 1 Day)  
One 2 day and one 1 day TiP onsite training visit for Optima XR200amx to Optima XR220amx upgrade.  
Includes T&L expenses. Days provided in two customer visits.  
This training program must be scheduled and completed within 12 months after the date of product delivery.