

HIGH PERFORMANCE SURGICAL C-ARM MOBILE

KMC-950

# COMED Mobile System

DIGITAL IMAGING MANAGEMENT SYSTEM

H.F. GENERATOR & ROTATING ANODE TUBE WITH DIGITAL WORKSTATION

KMC-950 C-arm mobile systems are integrated with triple field 9" image intensifier tube, CCD digital camera and rotating anode X-ray tube for R/F application. The C-arm x-ray generator is designed with state of the art microprocessor control and touch sensitive screen control panel which makes it easy for operation and visualization on the large LCD window.

The compact size, correct distribution of lighter weight and the large diameter of the wheels and steering handle allow for easy maneuverability, quick positioning and the necessary flexibility to perform a wide range of R/F procedures, meeting the needs of all medical healthcare facilities. KMC-950 C-arm is utilized in an inpatient or outpatient care clinics and hospitals for surgical, orthopedic, urology, angiography, trauma and pain management procedures.

Producing 125 kVp at 20 mA in Hi-fluoro-mode and HF constant x-ray energy, the HF generator provides improved image quality and reduces patient/operator radiation dosage. Further reductions in radiation dosage are realized with digital imaging acquisition and pulsed fluoroscopic modes of operation. The boost fluoro-mode allows rapid, high contrast image acquisition for an oversize or over weight patient during all fluoroscopic procedures.

CX-Viewer software utilized by the digital image workstation manages the KMC-950's images in a well organized DICOM database. The CX-Viewer software is designed for digital fluoro & CINE/ DSA realtime (optional) image acquisition and also has various image tools for image enhancement.



## FEATURES

- High Frequency Generator:
  - 125 kV/ 100 mA for Rad.
  - 125 kV/ 20 mA for Boost FL.
- Microprocessor Control & APR Panel
- LCD Touch Control Screen & Window
- High Power Inverter : 12.5 kW
- High Resolution II Tube : 9" II (Triple Mode)
- X-ray Tube : Rotating Anode Tube
- Focal size : 0.3 – 0.6 mm micro filament
- High resolution & Contrast in image quality
- Pulsed fluoro for dose reduction
- Boost fluoro (20mA) for high contrast image
- Auto Brightness Control (ABC) for fluoro image
- Motorized & Rotating collimator
- CCD camera 1K x 1K
- 19" LCD, LIH and noise reduction
- Digital Image System (DIS)
- DICOM Send
- Power requirement : 110/220 VCA
- 45° over scan
- 32" Free space

INTEGRITY  
MEDICAL

# KMC-950 Mobile Surgical C-ARM System

DIGITAL IMAGE MANAGEMENT SOFTWARE & DIGITAL IMAGE PROCESSOR

## SYSTEM SPECIFICATION:

### X-RAY GENERATOR:

- Type: High Frequency Inverter
- Controller: Microprocessor & E-PROM
- OP Console: LCD Touch Panel Screen and Membrane Switches
- Mode: Radiographic mode (Rad)  
Fluoroscopic mode (FL)
- Display Panel: LCD Display with Touch Screen
- Power rating: 12.5 kW Inverter
- KV range: 40-125 kVp, 1.0 kV increment
- Rad. mA range: 20-150 mA (programmable)
- Rad. mAs range: 0.4 to 500 mAs
- Fluoro mA: Normal FL: 0.3 – 5.0 mA  
Snap FL: 8.0 mA (pulsed)  
Multi-pulse: 0.3-5.0 mA  
Boost FL: 20 mA
- Exp.Timer: Rad. Mode: 3.0 ms to 8.0 sec  
FL. Mode: 0 to 5.0 minutes
- Auto. KV: Automatic Brightness Control (ABC) on fluoro mode of operation

### X-RAY TUBE:

- Type: Rotating Anode (Rad-99, Varian)
- Focal Size: 0.3 mm to 0.6 mm / micro focal
- Anode Target: 10 ° Target Angle / TM
- Heat Capacity: 300,000 HU
- KV Capacity: 125 kVp
- Filtration: 0.5 mm Al. @ 100 kV

### Motorized Collimator:

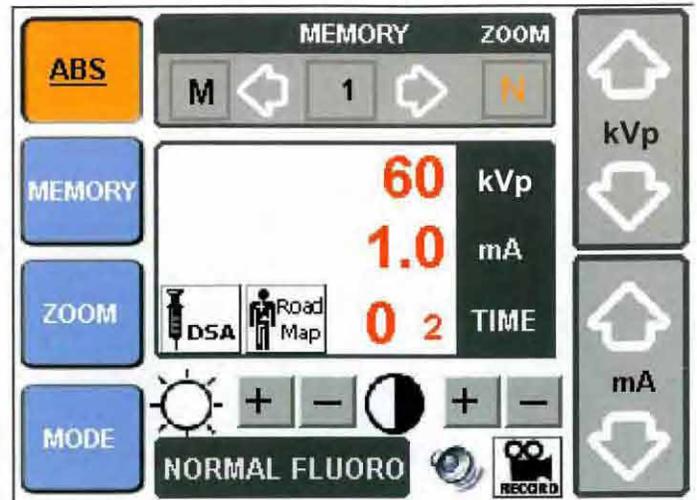
- Type: IRIS (Circular) motor driven
- Shutter: One (1) pair lead blade
- Filter: 2.5 mm AL. @ 100 kVp

### CASSETTE HOLDER:

- Mount type: Mounting bracket on II Tube.
- Size: 24cm x24cm or 24cm x 30cm
- Grid: 80 lines, 8:1 ratio, 28 "-32 " focus

### 1K x 1K Digital CCD CAMERA:

- Sensor: CCD Progressive scan
- CCD format: 2/3" x 2/3"
- No. of Pixels: 1004(H) x 1003 (V)
- A/D Converter: 12 Bit
- Display Control: On/Off, BL Level, DICOM mode, DICOM clear / blue



Operator Touch Control Panel

- Output: Camera link / 12 bit parallel
- Frame Rate: 30 fps
- Noise Reduction: Up to 16 level selections
- LIH: Last Image Hold function
- Image rotation: Continuous Electronic rotation

### LCD / DICOM Monitor:

- LCD Panel: a-Si TFT Active Matrix
- Resolution: 1280 x 1024 (SXGA)
- Screen Size: 19" diagonal
- Luminance : 680 cd/m<sup>2</sup> or 200 (fL)
- Video Input : DVI & VGA

## Digital Workstation & Mobile C-ARM **KMC-950** BEST SOFTWARE FOR IMAGE AND PATIENT FILE MANAGEMENT

### CX-VIEWER IMAGING SOFTWARE

CX-Viewer is the advanced image management system which is designed to meet the demands of today's complex & diversified medical imaging acquisition and procedures required for C-arm mobile applications.

"Search & View" functions make it possible to quickly find a study and view the images from the internal DICOM database. To send information to other DICOM Servers or PACS Systems, CX-Viewer can automatically create a DICOM file and send it.



### FEATURES:

- **Database management**
  - Very convenient for image storage and search.
  - Easy management of patient database.
  - Compare live images and saved images from the database side by side during a patient examination.
- **DSA & CINE record (Option)**
  - Movie & Cine record
  - Real time DSA & Cine Loop
  - Replay Speed ; Variable
- **Image Storage & Memory**
  - Hard Drive Capacity : 80GB Memory
  - Store more than 10,000 frames of images.
- **Variety of diagnostic image control tools**
  - Zoom, Contrast, Reverse, Rotation
  - Noise filtering, Edge Enhancement,
  - Image processing : Real time & Post processing
- **PACS Connectivity with DICOM**

### SPECIFICATIONS:

- **Computer PC System**
  - Window XP, Intel 2 Dual CPU

- 3 GHZ, 1.98 GB of RAM
- 160 GB hard driver
- Frame Grabber B/D & Dual display adapter
- Desktop case, Key board & mouse
- DIS software
- DVD/ CD-ROM drive

#### ▪ Data Acquisition

- Image Size: 1024 x 1024
- Pixel depth: 12 bits
- Automatic image capture
- Dual monitor display & operation

#### ▪ Image Processing

- Window Level (contrast adjustment)
- Real time & Post-Processing
- Pan & Zoom Control
- Image flip (Horizontal & Vertical)
- Image rotation (360 °)
- Noise reduction & recursive filter
- Edge Enhancement (sharpness)

#### ▪ Image Management

- Create a patient file & database
- DICOM send & CD Burn
- Networking to PACS
- Local Printer Connection

#### ▪ Overlay Image Data & Display

- Patient, Study & Image Information
- Multiple display : up to 4 x4 matrix format
- Video Image record & Play
- Cine Loop (Optional)

#### ▪ Image Storage

- More than 10,000 images on 160 GB/ HD
- JPEG compression
- Convertible to a general format : BMP, JPEG, TIFF ... etc



**MECHANICAL SPECIFICATION****C-arm 600 lbs  
Orbital Rotation 135°**

Premium Monitor Cart

**comed**  
The Power of Passions**Monitor Carts**

Standard Monitor Cart

**C-Arm Movement & Dimension**

- Free space in arc: 32"
- Depth of arc: 27"
- Orbital rotation: 135 degrees
- Horizontal travel: 7.9"
- Vertical travel: 17.7"
- Panning motion: +/- 12.5 degrees
- Pivot rotation: +/- 180 degrees
- Motion Lock: Friction locks for all motion
- Steering handle: two rear wheels
- Brake: dual foot brake on side
- Overscan: 45 degrees

**Full CDRH Compliance**

KMC-950 C-arm mobile system conforms to all applicable requirements of the Center for Devices and Radiological Health Dept. and Human Services, 21 CFR Chapter I, Sub-chapter J, at time of manufacture.

**Power Requirements:**

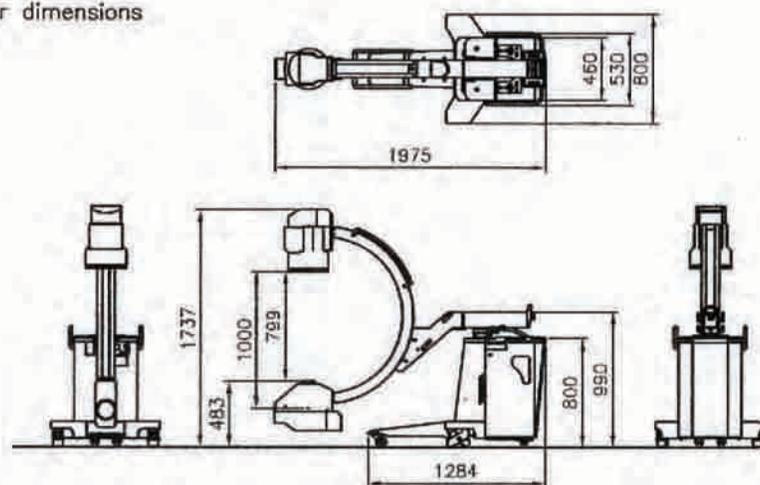
**Max Power: 3.3 KVA @ 110 VAC**  
**Line Voltage: 110/220 VAC, 50/60 Hz**  
**Line Current: 25-20 amp @ 110-VAC**

DIGITAL IMAGING MANAGEMENT SYSTEM

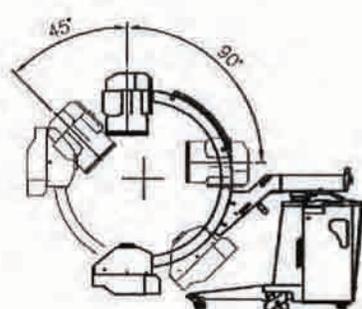
## C-Arm Dimensions and Functional Movement

1. KMC-950 SID 1000
2. 950 Travel:  $90^{\circ} + 45^{\circ} = 135^{\circ}$
3. 950 STAY Roller ADD

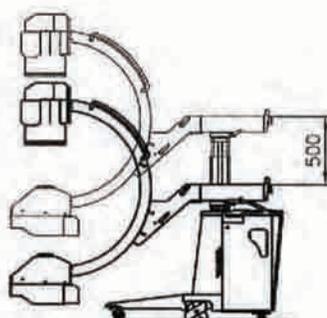
Outer dimensions



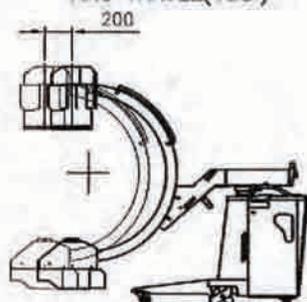
Range of movement



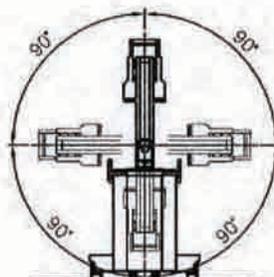
ARC TRAVEL(135°)



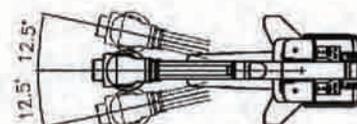
VERTICAL MOVEMENT(500mm)



HORIZONTAL MOVEMENT(200mm)



ROTATION(360°)



PIVOT MOVEMENT

**Quality Imaging**  
Begins With Quality Glassware  
**Varian X-RAY Tubes**  
And  
**Thomson/Thales**  
Image Intensifiers



# COMED Mobile System

# KMC-950

DIGITAL IMAGING MANAGEMENT SYSTEM

## Optional C-Arm UPGRADES Available:

Vascular 10 FPS Cine Loop with Subtraction  
Daily patient Work List Dicom  
Virtual Collimation and Dose Meter



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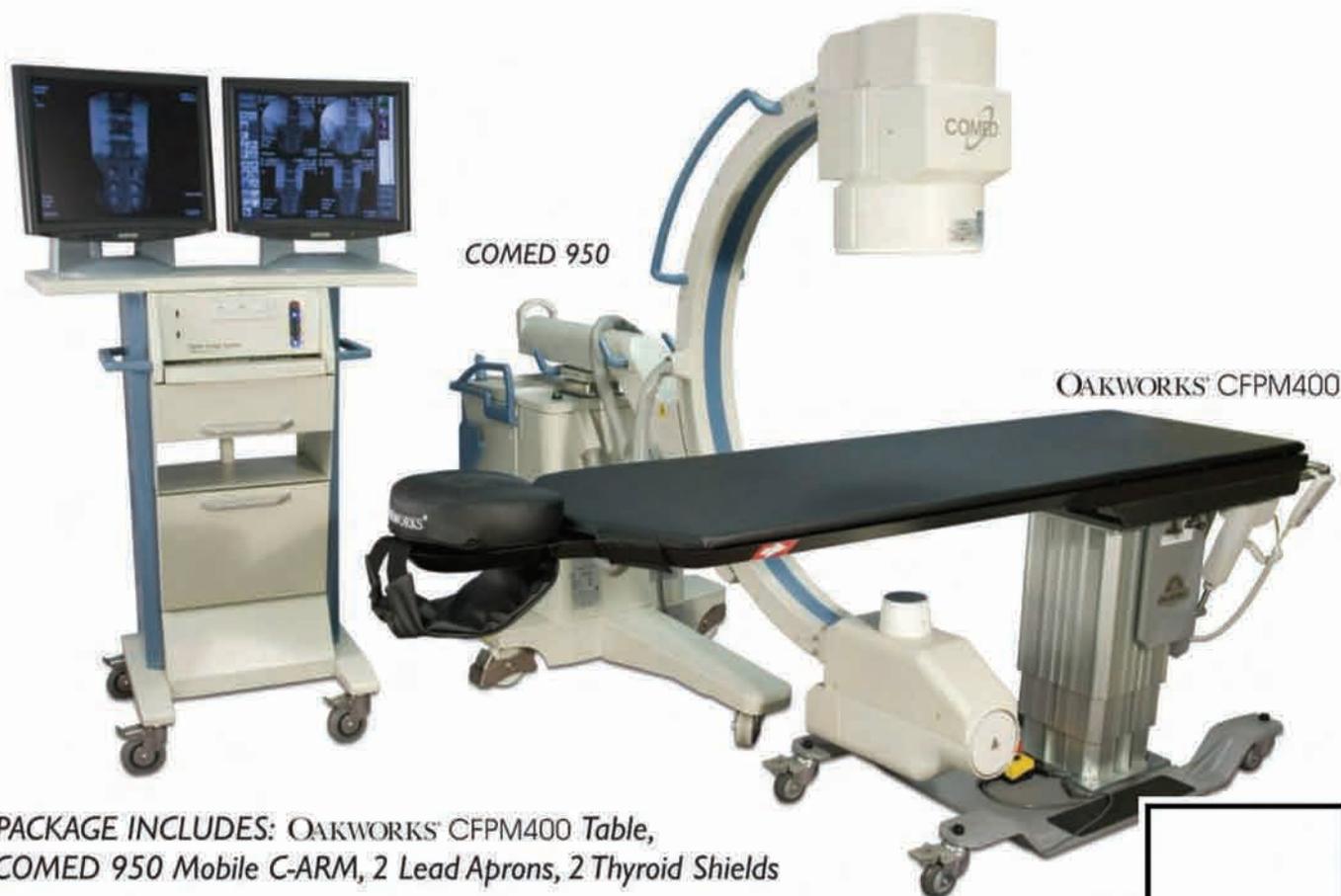
# THE NEW EYES OF IMAGING

**NOW AVAILABLE**

*6 Month Deferred Leasing Program*

*teaming up to provide the most*

**COST EFFECTIVE IMAGING PACKAGE**



PACKAGE INCLUDES: OAKWORKS' CFPM400 Table,  
COMED 950 Mobile C-ARM, 2 Lead Aprons, 2 Thyroid Shields

For more info contact Integrity Medical Systems, Inc.

800-722-3646

