

DEL MEDICAL

MCA18

MOBILE C-ARM SYSTEM



System Overview

Versatile Performance

The MCA18 is a mobile C-arm unit used to perform a variety of real-time imaging applications, including surgery, orthopaedics, angiography, interventional procedures, intensive care, and pain management. Its highly ergonomic design and perfect C-arm weight distribution make it easy to position and maneuver, especially in tight spaces. Featuring a high frequency 15kW monobloc generator, rotating anode and the choice of either 9" I.I or 12" I.I., the MCA18 provides operators with access to a comprehensive range of surgical procedures.



Key Highlights



Accommodating System Movements



High Frequency Monobloc Generator



Rotating Anode



High Resolution 1 k x 1 k CCD Camera



9" Image Intensifier
12" option available



Liquid Cooling System



Dose Optimization



System Features

Flexible Positioning

The MCA18 promotes a wide range of movements to accommodate any imaging environment. A button dedicated to motorized vertical travel extends c-arm range when a particularly low position has been reached. The large opening and depth of its arc allow technologists to easily avoid interference while positioning patients. This becomes especially useful when positioning around a mobile table. The MCA18 can easily maneuver in any direction through the use of an ergonomic steering handle. All system wheels are equipped with cable pushers, preventing interference from cords on the floor.

Dose Efficient

During long fluoroscopic procedures it is crucial to minimize dose exposure. The MCA18 offers three operating modes which include: continuous fluoro, pulsed fluoro and single image snapshot. These modes help to provide the highest image quality with the least amount of patient dose. Operators of the MCA18 can easily toggle between modes by use of a multi-functional foot-pedal, without making additional adjustments at the workstation.

Patient dose can be continuously monitored by an integrated DAP meter and a laser pointer helps with pre-alignment of the radiated area, without unnecessary exposure. In addition, the MCA18 features intelligent anatomical programming, digital image rotation, a low dose mode, and specific Paediatric settings to further reduce radiation dose.



Positioning with laser light enhances accuracy without the need of exposure (optional)



Anatomical programming automatically chooses optimized dose based on patient size and anatomy



Three operating modes allow users to toggle between different exposure settings to reduce dose without compromising image quality.



Low Dose Mode



Paediatric mode offers high dose efficiency by carefully selecting the correct settings for child anatomy

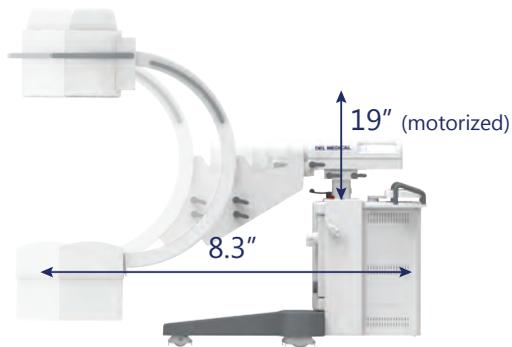


Rotate digital image without additional radiation exposure

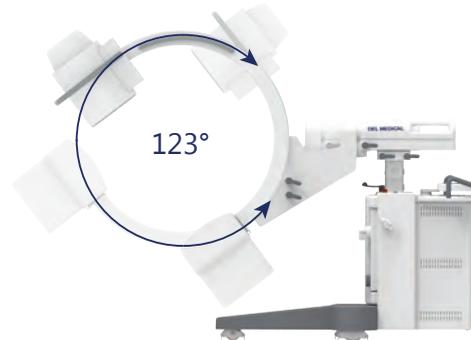


A DAP meter can effectively determine radiation exposure before positioning the patient (optional)

Horizontal and Vertical Motion



Orbital Rotation



Panning Motion



Pivotal Rotation

Ergonomic Controls

The on-board control panel can be quickly rotated $\pm 60^\circ$ to adapt to the technologist preference and position. Its durable, membrane buttons were designed to withstand years of repeated cleaning cycles without fading. A central touchscreen LCD display informs user of all valuable information during procedures.



Generator and X-ray Tube Cooling

Surgical procedures can be lengthy and without proper temperature management, the system can overheat. Thankfully, the MCA18 is equipped with an intelligent liquid cooling system designed to effectively manage generator and tube temperature. This feature provides users with uninterrupted usage of the system during these prolonged operations.



High Resolution Imaging Cart

The MCA18's high resolution 1K x 1K CCD camera delivers sharp and detail-rich images throughout the most demanding exams including intricate Digital Subtraction Angiography (DSA). Images are beautifully displayed on dual 19" TFT flatscreen monitors located on a stand-alone imaging cart. The cart can be moved freely around the procedure room to provide operators and staff with clear viewing angles. It features an easy to clean membrane keyboard, wheel safety locks, and optional upgrades such as a printer and CDR/DVD burner. The unit stores all images in memory, this means that they can be reviewed at any time even after the system has been powered off and disconnected from the C-arm.



Surgical Table

The MCA18 can be paired with an optional high quality pain management mobile table to enhance efficiency, comfort, and convenience for operator and patient. This table features five motorized movements controlled by remote control, a patient weight capacity of 500 lbs., and hospital grade locking casters for great mobility and safety.



Technical Specifications

* All specifications subject to change without notice

MCA18 C-arm

Motor driven vertical travel:	19" (48.3 cm)
Horizontal travel:	8.3" (21.1 cm)
Panning motion:	±270°
Orbital rotation:	123°
Pivotal rotation:	±12.5°
C-arm opening:	30" (76.2 cm)
C-arm depth:	27" (68.6 cm)

Mobile Surgical Table

Table top length:	82 in. (208.3 cm)
Table top width:	22 in. (56 cm)
Motorized elevation travel:	Minimum 26 in. (66 cm) to Maximum 38 in. (96 cm)
Motorized trendelenburg tilt:	±15°
Motorized lateral tilt:	±15°
Motorized longitudinal travel:	15.7 in. (40 cm)
Motorized lateral travel:	8 in. (20 cm)

