

OMNISCOP

TECHNICAL SPECIFICATIONS

OMNISCOP DREAM 30- RK20 VERSION 2



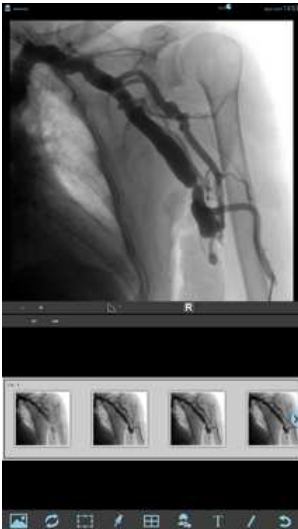
OMNISCOP DREAM 30- RK20 – VERSATILE C-ARM

It consists in two main parts:

- The C-Arm with a highly accurate mechanical design allowed for a creative combination of low weight and a high power X-ray generator, producing an extremely compact, reliable and ergonomic mobile system
- The view-Station with its open and light structure for easy positioning and transport associated with two medical displays

APPLICATIONS

The Omniscope DReam 30-RK20 is a system that provides excellence image quality and maneuverability, which are essential to a wide range of surgical and vascular procedures.



ORTHOPAEDIC
NEUROSURGERY
THORAX
ABDOMEN
VASCULAR PERIPHERAL
VASCULAR ABDOMINAL
VASCULAR CEREBRAL
CARDIAC
PAIN TREATMENT

MAIN FEATURES

- Flat Panel with very high sensitivity, low dose operation (154 μm)
- Height & Angle adjustable of 21.5" Full HD wide displays
- Removable grid for paediatric applications
- Full touch "smart" user interface
- Extended C-arm free space
- Image free of distortion
- Double pedals

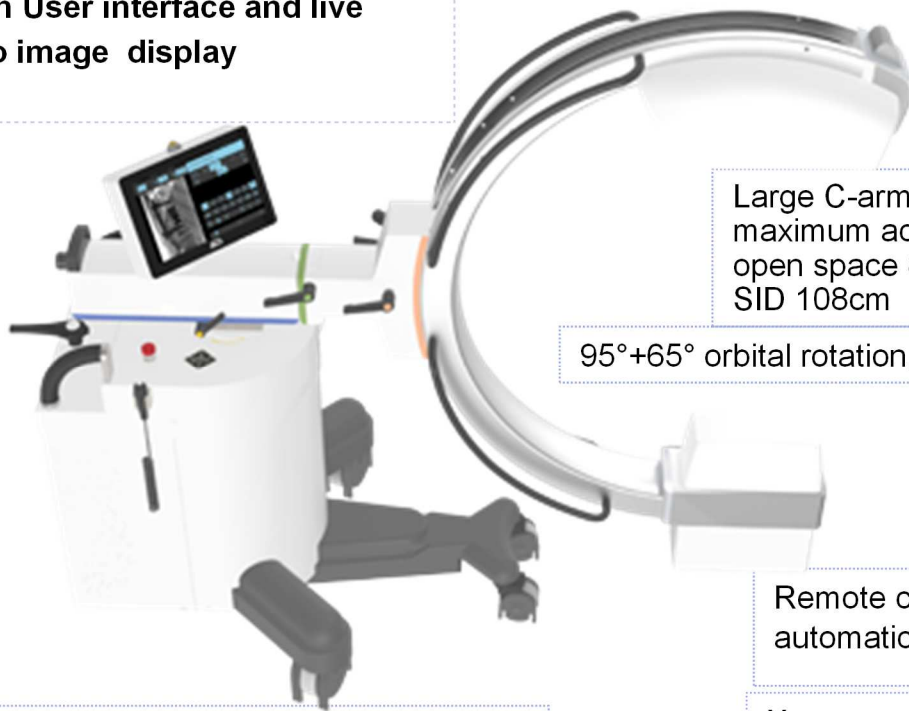


C-ARM

› GLOBAL VIEW :

Smart operator console: Full Touch User interface and live fluoro image display

Very high sensitivity Csl,
30x30cm fluoroscopy flat panel



Large C-arm depth for maximum accessibility:
open space 81 cm and
SID 108cm

95°+65° orbital rotation,

Remote controlled and
automatic filters

Special soft covers around the base protecting
the operator against accidental collisions

X-ray generator
20kW max. Power
120kV - 150mA

› MECHANICAL DATA :

- › Motorized vertical stroke : 450 mm (speed 1cm/s)
- › Horizontal stroke : 200mm
- › Wig-wag : +/-12°
- › Arc rotation around horizontal axis : +/- 200°
- › C-Arm sliding : 160°
- › SID (FPD/focal spot) : 1080 mm
- › Flat panel detector/monoblock distance : 810 mm
- › Arc depth : 707 mmm
- › Stand/monitor unit connection : 6m cable

FLAT PANEL DETECTOR - PIXIUM 3030S

- › Technology : Csl scintillator coupled to TFT matrix aSi
- › Pixel pitch : 154 μm
- › DQE@2 μGy .RQA :
 - 0 lp/mm : 77%
 - 1 lp/mm : 57%
 - 2lp/mm : 48%
 - 3.2 lp/mm : 22%
- › MTF :
 - 1 lp/mm : 59%
 - 2lp/mm : 29%
 - 3.25lp/mm : 14%
 - IEC Nyquist : 11%
- › A/D conversion : 16 bits
- › Useful area : 301 x 301 mm
- › Matrix : 1956 x 1956 pixels
- › Frame rate max : 25 FPS
- › Weight : 12.7 kg
- › Cooling : Passive
- › Nominal field :
 - 301x301 mm² : 1956x1956 pixels
 - 1^{er} zoom : 207x207 mm² : 1344x1344 pixels
 - 2^{ème} zoom : 158x158 mm² : 1024x1024 pixels
- › Max Dimensions : 374mm x 374mm x 78.5mm
- › Power supply : 24 V - 14W



X-RAY GENERATOR - HF1

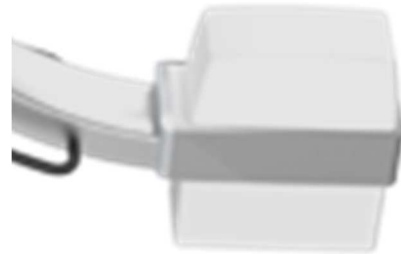
- › High frequency 40 kHz
- › Max voltage 120 kVp
- › Max mA in continuous fluoroscopy : 12.5 mA
- › Max mA in pulsed fluoroscopy : 100 mA
- › Max mA in digital radiography : 200 mA
- › Energy storage unit : yes
- › Max power supplied : 20 kW

MONOBLOCK - I40R15RF

- › Max power : 20 kW
- › Thermal capacity : 1020 kJ
- › Max continuous heat dissipation : 150 W
- › Total filtration : 3 mm Al eq

X-RAY TUBE - RTM70

- › Rotating Anode : 3000 rpm : 50Hz / 3600 rpm : 60Hz
- › Anode material Rhenium/Tungsten/Molybdene
- › Focus : Small focus: 0.3 mm / Large focus: 0.6 mm
- › Anode angle 10°
- › Anode heat capacity 225 kJ
- › Max anode heat dissipation 750 W
- › Nominal anode power : Small focus: 6 kW /Large focus: 25 kW



GRID - JPI-ACS

- › Removable
- › Dimensions : 215 x 215 mm
- › Interspace Al
- › Ratio 8:1
- › Line rate 80 lines/ cm
- › Focus distance : 100 cm

COLLIMATOR - R 650 QDASM / 010C COUPLED TO A SECOND RS 2248 COLLIMATOR

- › Field Square
- › Iris :
 - Continuous adjustment of the aperture
 - Automatic adjustment adapted to the size of the field
 - Manual mode
- › Collimator:
 - Continuous adjustment of the aperture
- › Clockwise and counterclockwise rotation, continuous adjustment
 - Manual mode
- › Maximum field size: 30x30 cm²
- › Remote controlled filters: 2 mm Al, 1 mm Al + 0.1 mm Cu, 1 mm Al + 0.2 mm Cu, no filter

LASER LOCALIZER - ML635L CLASS 1M (TUBE SIDE AND DETECTOR SIDE)

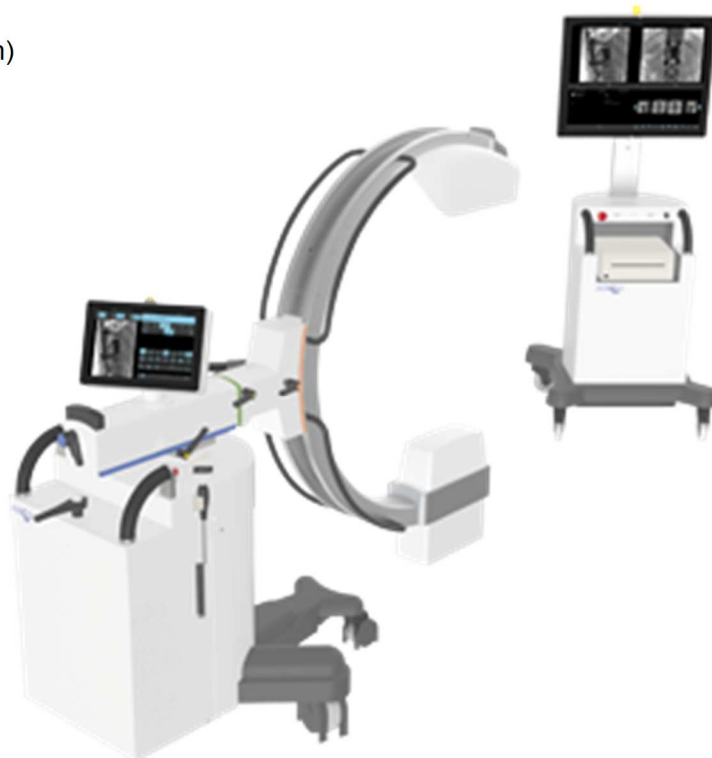
- › Power of the diode: < 5mW
- › Optical output power: 3.8 mW
- › Wavelength: 635 nm

DOSE AREA PRODUCT - KERMAX PLUS (120-123C)

- › Power supply : DC : 12-29V (max 50mA)
- › Useful area diameter : 72mm
- › Sensitivity : 1mGy x cm²

EXPOSURE MODE

- › Continuous fluoroscopy
- › Pulsed fluoroscopy
- › Radiography
- › Road Mapping (option)
- › DSA (option)



STATIONS

OPERATOR CONTROL PANEL: MUIP-2112 BARCO

- Only touch operation
- Technology : multi-touch, colour LCD 12" panel
- Application : image live and full operator interface control
- Console positioning : 320° rotation
- Vertical and horizontal movements 80°
- Processor : CPU Intel Celeron N2930 (Quad core 1,83 Ghz, 2Mb cache), 4GB DDR3L 1333MHz RAM, 32GB SATA onboard SSD
- Software : ARCO FP, OS : Windows 10 LTSB
- Display contrast : 1000:1
- Displays brightness : 400 Cd/m² typical
- Displays useful area : 276,5 mm x 157,5 mm
- Power supply : 12-24 V



LIVE AND REFERENCE MONITORS

- Smart user interface : only touch operation, no keyboard and mouse
- Technology : Multi-touch, colour LCD panel, LED backlight
- Application: Medical display, clinical review monitor
- Size, Resolution, Viewing angle : two 21.5", 1920x1080pixels, full HD, 178°
- Brightness : 600Cd/m² typical
- Contrast : 5000:1
- Displays height : 178-153 cm continuous adjustable
- Displays rotation : +/-180° continuous adjustable
- Easy to clean without keyboard and mouse
- Power supply 110-230 V AC
- Max. consumption 45 W
- Dimensions 531x339x70 mm
- Weight 7.6 kg



POST-PROCESSING IMAGES

- › The live monitor displays the acquired image
- › All the images saved to hard disk can be processed
- › Patient data entry
- › Emergency mode
- › X-ray generator configuration for kV and mAs (available only in digital radiography).
- › Cine-loop of acquired run
- › Contrast / Brightness control (W and L)
- › Edge enhancement/reduction (sharp/smooth), with specific kernel settings (from 3 x 3 to 9 x 9 pixels)
- › DRC (Dynamic Range Compression), digital process to optimise image and contrast latitude
- › Grey scale inversion (negative)
- › Multi-frame display (max 6)
- › Electronic shutters
- › Virtual shutters
- › Angle/distance measurements
- › Text entry (free or fixed strings)
- › Pen for drawing marks on images
- › Using a target for precise positioning
- › Printouts using Windows compatible printer
- › Saving of images to USB memory stick in DICOM format
- › System status information and alarms
- › Protocols creations by exams: in V2 there is no limit of number of protocols
- › Selecting a reference image



DOUBLE PEDALS

- › Wired pedal:
 - Left pedal for low dose fluoroscopy
 - Right pedal for high quality fluoroscopy
 - The right pedal can be set in another mode (radiography, RoadMap or DSA fluoroscopy). Each test protocol can have a different setting
 - › WiFi pedal (option): It has the same functions as the wired pedal
- Standby after 15 minutes of non-use.
- Standby output up to 1 second after a press (depends on the reconnection time of the pedal to the receiver)

POWER SUPPLY

- › Single phase voltage : 230V AC +/- 10% ; 50Hz / 120V AC +/- 10% ; 60Hz
- › Max consumption :
 - Continuous fluoroscopy : 11 A
 - Pulsed fluoroscopy : 15 A
 - Radiography : 26 A
- › Line resistance : max 0.4 Ohms
- › Connector (conforms to IEC 309) : 16 A

ENVIRONMENTAL CONDITIONS

- › Storage temperature: -10 / +55 ° C / relative humidity without condensation: 20-70% / Pressure: 70-106KPa
- › Operating temperature: + 10 / + 35 ° C / relative humidity without condensation: 30-70%

OPTIONAL ITEMS

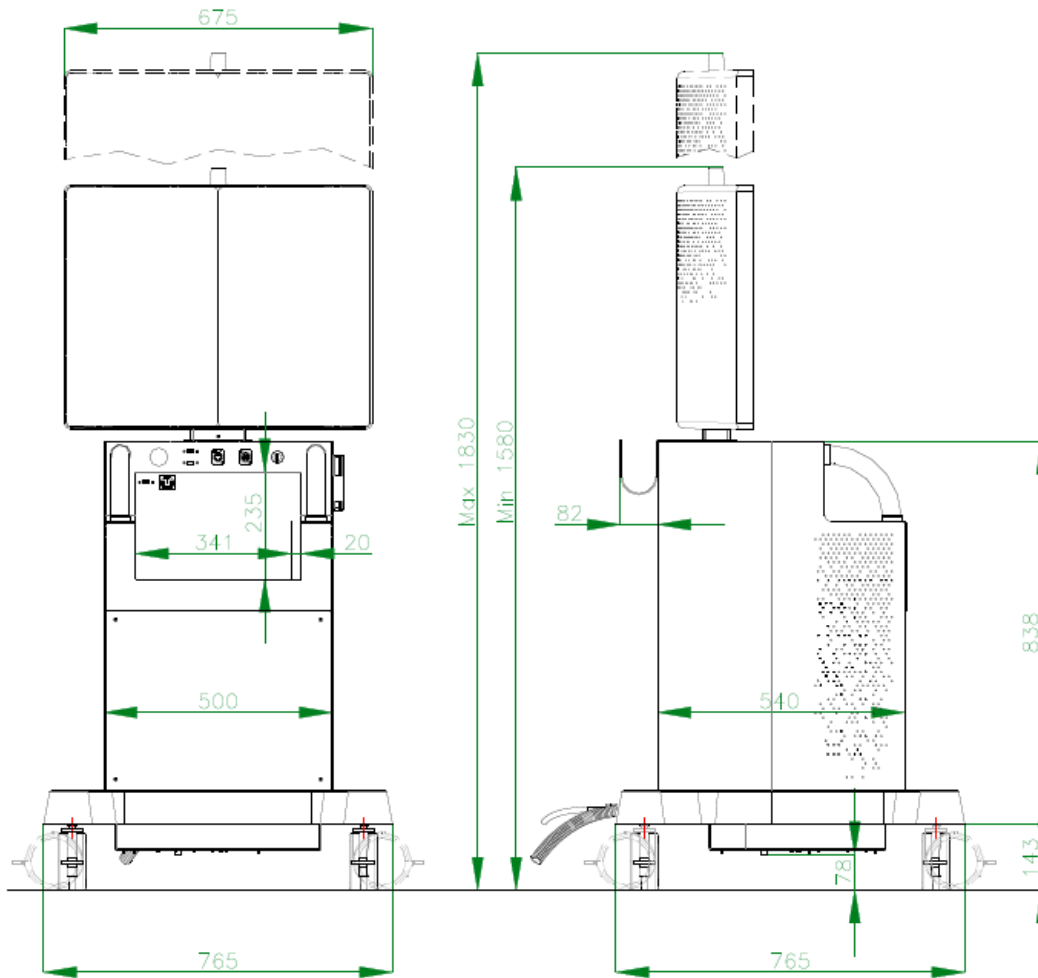
DSA functions

- › DSA
- › Road Mapping
- › Coupling possible acquisition with an injector
- › Mask pick-up
- › Subtraction
- › Pixel Shift
- › Land marking
- › Catheter calibration
- › Stenosis measurements

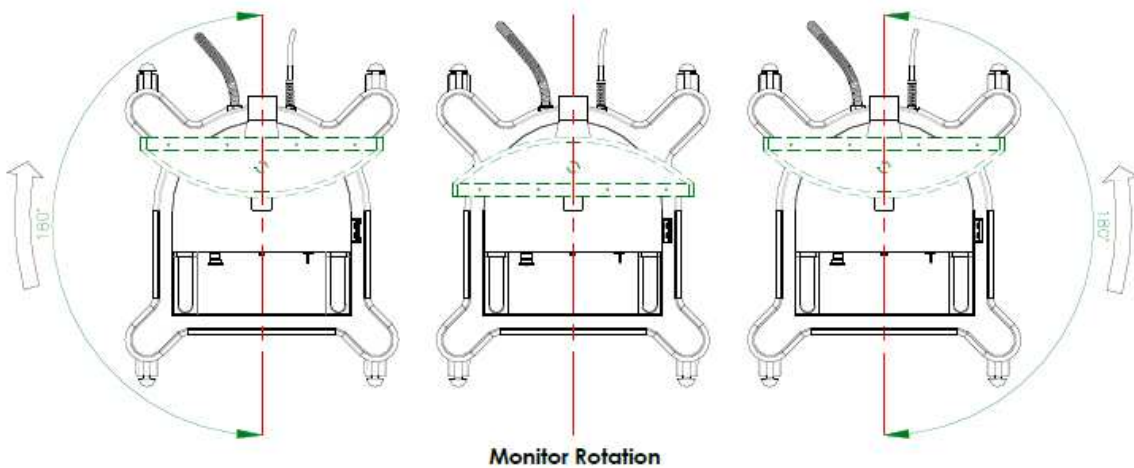
DICOM functions

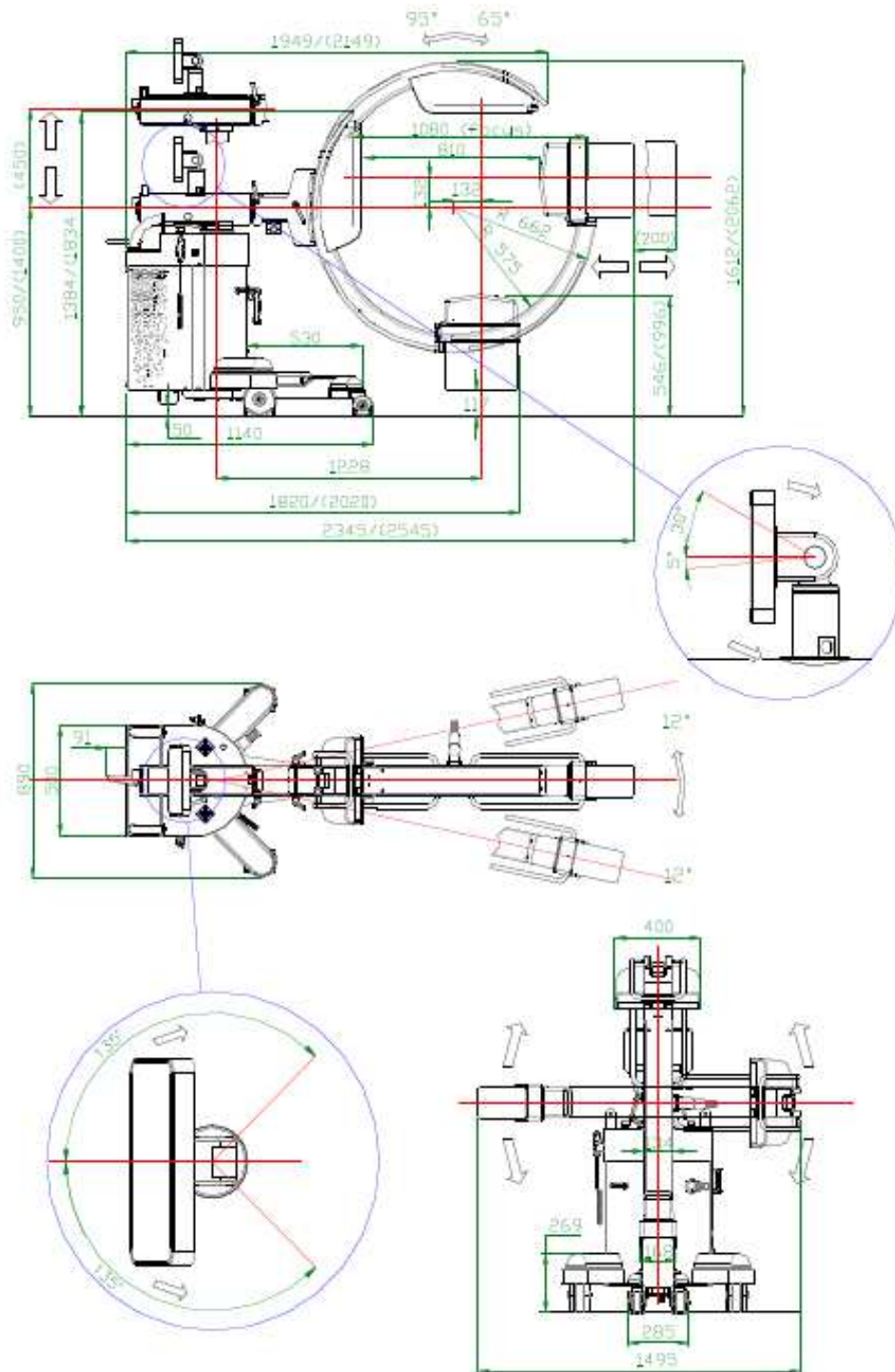
- › Worklist
- › Store
- › Print
- › Query/retrieve with a dedicated viewer
- › Media Export (DIR), USB
- › MPPS
- › Storage commitment
- › RDSR (structured dose report)

DIMENSIONS



WEIGHT: 140Kg





WEIGHT: 280 Kg

These products are class IIb medical devices.

They are intended for the realization of medical imaging acts.

The acts performed with these systems can be taken care of by health insurance organizations in certain situations (and under conditions).

Please carefully read the instructions in the user manuals or on the labels.

Medical devices manufactured by ATS / ARCO FP / CE 0051 / IMQ

Revision Date: 03/10/2018