visitor T40 M-DR

Motorized digital mobile X-ray unit with 40 kW generator and portable Flat Panel detector

Product Data

X-ray generator

Technology	Microprocessor managed control panel
Frequency	40 kHz in high voltage
Ripple	< 2% @ 100 kV
Power	Max. 40 kW
Total thermal capacity	500 kJ (680 kHU)
Operating modes	2 points technique (kV / mAs settings)
kV range	40 – 130 kV (1 kV steps)
mA range	70 – 400 mA according to kV selection
mAs range	0.1 – 320 mAs (12.5% steps)
Time range (according to mAs selection)	0.001 – 3 s
Exposure controls	- Double switch X-ray handswitch with extensible cable. - Remote control (optional)
User's interface	Keyboard with alphanumeric LCD display
Service program	Dedicated application for technical assistance: - unit parameters configuration - warnings management - X-ray tube seasoning and calibration - Flat Panel detector calibration - DAP calibration - motor setup - check and management of batteries' status - history of the last 200 exposures

X-ray tube

Type	Rotating anode, 3000 rpm
Focal spots	Small focus: 0.6 mm Large focus: 1.2 mm
Nominal focus power	17 kW small focus; 43 kW large focus
Anodic diameter	73 mm
Anodic angle	12.5°
Anode material	RT-TZM
Max. continuous anode dissipation	500 W
Anode thermal capacity	220 kJ (300 kHU)

Collimator

Collimation	Manual collimator with internal light source, multilayer, square field
Light source	High brightness power led cluster
Light intensity	> 160 lux
Timer	30 s light timer
SID measurement	Extractable meter
Collimator rotation	± 120°
Additional filtration by manual selection	1 mm Al + 0.1 mm Cu; 1 mm Al + 0.2 mm Cu; 2 mm Al

Digital system – panel PC

Type	19" LCD TFT colour touch screen monitor with anti-glare surface
Resolution	1280 x 1024 pixel
Brightness	350 cd/m^2
Contrast	1000:1
Processor	Intel Core i7 1,5 GHz
RAM	4 GB
Hard disk	320 GB, >15000 storable images
Acquisition	16 bit
Operating system	Windows 7 Professional
Interface	- Ethernet TCP/IP: standard DICOM 3 - Wireless network: 802.11 n - CD/DVD burner: USB
Image acquisition and processing software	Choice between two software during product configura-tion: - DELUXE software - MOBILRAD software See detailed information on respective tables

DELUXE software

Exam preparation and image acquisition functions	- Manual creation of patient data card or automatic selection from RIS/HIS through Worklist function - Emergency registration of patient - Programmable exposure factors for each exam and with manual adjustment capability, choice among 4 patient sizes - Display of information about flat panel detector and generator status - Image display following the acquisition
Image processing functions	- Automatic application of processing filter according to the acquired projection - Display and adjustment of LUT curve - Brightness and contrast adjustment - Image repositioning - Zoom - Image cropping - 90° rotation - Vertical/horizontal image inversion - Greyscale image inversion - Calibration and measure functions (distances, angles) - Cobb angle measure - Notes and graphic elements insertion - Possibility to accept or refuse the image
Print	Print editor with possibility to select different print layout formats, number of images, capability of image adjustment during printing phase
CD/DVD writer	It is possible to store images on CD/DVD support in DICOM format or other (JPEG, RAW), with integrated viewer
DICOM functions	- Verify - Storage - Storage Commitment - Print - Worklist - MPPS - CD/DVD DICOM Media Interchange - Query/Retrieve
Compatible Flat Panel detectors	Cabled detectors: PaxScan 4336R, FDX3543RP Wireless detectors: PaxScan 4336W, FDX3543RPW, Pixium 3543EZ, FDX4343RPW For detector's technical features, please refer to its dedicated product data

MOBILRAD software

Exam preparation and image acquisition functions	- Manual creation of patient data card or automatic selection from RIS/HIS through Worklist function - Emergency registration of patient - Programmable exposure factors for each exam and with manual adjustment capability, choice among 4 patient sizes - Display of information about flat panel detector and generator status - Image display following the acquisition
Image processing functions	- Automatic application of processing filter according to the acquired projection - Display and adjustment of LUT curve - Brightness and contrast adjustment - Greyscale image inversion - 90° rotation - Vertical/horizontal image inversion - Tissue harmonization function - Application of spatial filters, with choice of filter type (smooth, sharp), matrix size and filter weight - Variable zoom from 1 to 3 - Notes and graphic elements insertion - Calibration and measure functions (distances, angles) - Electronic collimators function - Image mosaic display (4, 9, 16, 5+1, 7+1)
Print	Print editor with possibility to select different print layout formats, number of images, capability of image adjustment during printing phase
CD/DVD writer	It is possible to store images on CD/DVD support in DICOM format with integrated viewer
DICOM functions	- Verify - Storage - Storage Commitment - Print - Worklist - MPPS - CD/DVD DICOM Media Interchange - Query/Retrieve
Compatible Flat Panel detectors	Cabled detectors: PaxScan 4336R, FDX3543RP Wireless detectors: FDX3543RPW, Pixium 3543EZ, XRpad 4336, FDX4343RPW For detector's technical features, please refer to its dedicated product data

Mechanical features

Wheels diameter	Anterior: 125 mm, antistatic, cushioned Posterior: 300 mm, antistatic
Max. length in transport position	1174 mm
Max. height in transport position	1855 mm
Max. width in transport position	576 mm
Handle height	890 mm
Focus-floor distance	758 – 2045 mm
Maximum height	2242 mm
Tube rotation around sagittal axis	± 180°
Tube rotation around transversal axis	-37° ÷ +90°
Arm extension	Extension of 360 mm. 710 ÷ 1070 mm (frontal range) 517 ÷ 877 mm (lateral range)
Column rotation around its axis	± 320° from parking position
FPD holder	Housing for Flat Panel detector and grid
Weight (without Flat Panel detector)	435 kg, including batteries

Motor-driven battery system

Battery type	VRLA (Valve regulated lead acid batteries)
Battery pack	12 batteries x 12 V, 18 Ah, Pb, 144 Vdc
Nominal voltage	144 Vdc
Load voltage (worst case)	100 V @ 200 A
Low battery indicator	Yes
Typical charging time	6 h
Safeties	Overtemperature, overvoltage, charge timeout
System autonomy	> 8000 mAs
Forward speed	0 ÷ 5 km/h (arm in transport position)
Backward speed	0 ÷ 2,5 km/h (arm not in transport position)
Maximum overcomable slope	12° (21%)
Safeties	- Anterior anticollision bumper - Emergency pushbutton

Electrical features

Power supply (only for batteries charging)	115 / 230 Vac ±10%, 50/60 Hz
Adsorbed current	10 A
Max. line resistance	< 1 Ω
Connection to standard mains outlet	16 A @ 230 Vac
Power cable	2.9 m, retractile

Environmental conditions

Operating conditions	Temperature: Humidity: Pressure:	from +10° to +40° Celsius from 30% to 75% non condensing from 700 hPa to 1060 hPa
Conditions for transport and storage	Temperature: Humidity: Pressure:	from -25° to +70° Celsius from 10% to 90 % non condensing from 500 hPa to 1060 hPa

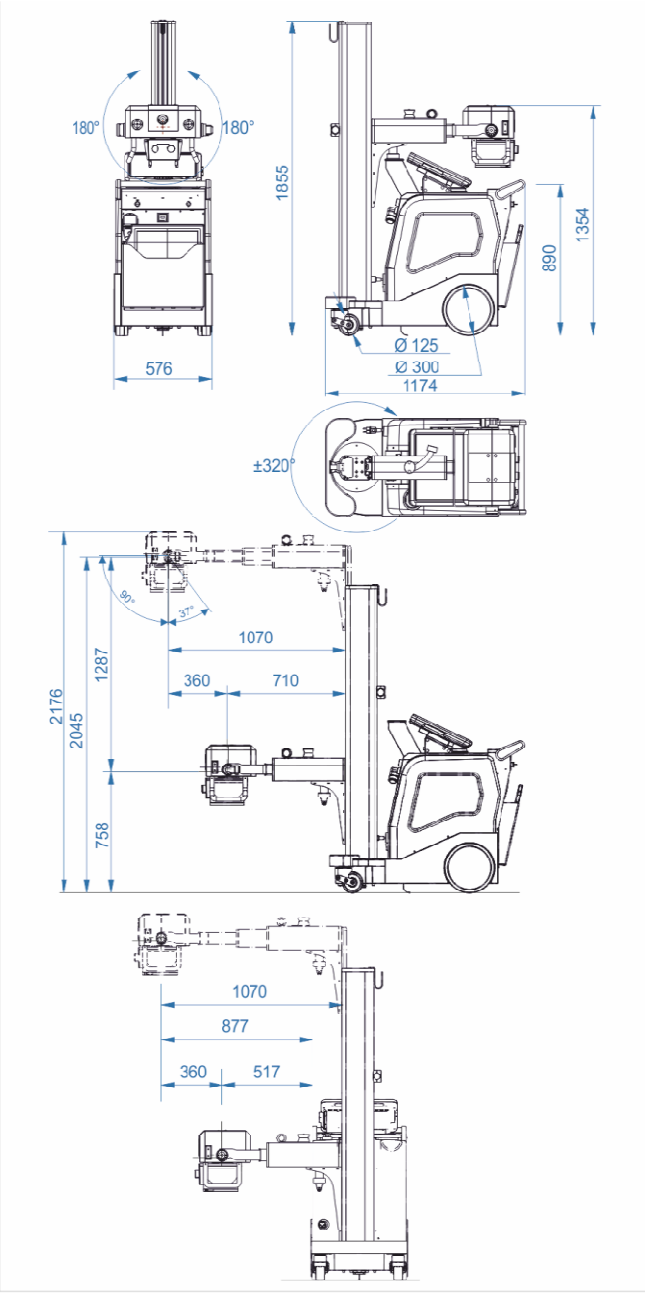
Accessories

DAP chamber dosimeter	Option
Remote control	Option
Wi-Fi data transfer to PACS	Option

Standard and regulations

CE 0051	CE symbol grants the product compliance to the European Directive for Medical Devices 93/42/EEC and its revised versions as a class IIB device

Dimensions (all quotes in mm)



Note: Products are continuously under review in the light of technical advancement. The actual specification may therefore be subject to improvement or modification without notice.

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