

 Solutions for tomorrow

# TRUE X-RAY MOBILITY<sup>®</sup>



## M1 MOBILE X-RAY

### TECHNICAL SPECIFICATIONS

## BASIC INFORMATION

TECHNICAL DATA	SPECIFICATION
Model	M1
Total weight	713 lbs (324 kg )
<b>Dimensions</b>	
Width	22.8" (580 mm)
Length body	44.5" (1130 mm)
Length with handle	49.0" (1245 mm)
Height	47.2" (1200 mm)

## MOVEMENT RANGE & SPEED

TECHNICAL DATA	SPECIFICATION
<b>Column</b>	
Focal spot to floor	20.9 -76.8" (530 - 1950 mm)
<b>Telescopic arm</b>	
Total reach	52.8" (1340 mm)
Rotation	+/- 270 °
<b>Tube head</b>	
Rotation	+/- 135 °
Tilt	-10 to 90 °
Collimator	+/- 90 °
Drive handle, adjustable height	4.7" (120 mm)
<b>Movement backwards/forward, speed</b>	
Transportation mode	max 3.4 mph (5.5 km/h)
Examination mode	max 1.9 mph (3 km/h)
Maximum safe slope for driving	10 °
Maximum safe slope in operational position	5 °

# ELECTRICAL SYSTEM

TECHNICAL DATA	SPECIFICATION
<b>Power Supply</b>	
Power supply rating	800 VA
Voltage	100 - 240 VAC (+/- 10%)
Frequency	50/60 Hz
Ground resistance	<0.2 $\Omega$
Power cord, length	13' (4 m)
Power cord, connector	EU, GB, US, JP
<b>Battery</b>	
Type	Lithium-Ion
Total weight	55lbs (25 kg)
Lithium content	0.44lbs (0.2 kg)
Dimensions (LxWxH)	19.6 x 9.0 x 7.6" (498 x 228 x 192 mm)
Voltage output	Max 200V, 185 Nom
Electric charge	6.2 Ah
Rated energy	1171 Wh
Main switch	80A, characteristic B
Charging time from 0% to 100%	Approximately 90 min
Operation time	Up to 9 hours (1200 exposures of 100 kV and 10 mAs or 9.4 Miles of driving)
10 min charging gives 1 hour operation time	
<b>High voltage generator</b>	
Type	High frequency X-ray generator
Power output	Max. 32 kW at 100 mS
Nominal power output	N/A
Power supply rating	N/A (battery operated)
Current time	0.1 - 320 mAs
Tube voltage setting range	40 - 125 kV (40 - 133 kV as option)

TECHNICAL DATA	SPECIFICATION
<b>Wifi</b>	
Standard	IEEE 02.11 b/g/n/ac
Frequency	2.4 GHz, 5 GHz
Transfer speed	1.73 Gbps
<b>X-ray system</b>	
kVp value	40 - 125 kVp in 1 kV step (40 - 133 kVp as option)
kV accuracy	+/- 2 kV
mA range	13 - 320 mA (13 - 400 as option)
mAs range	40 - 100 kV - 320 mAs
	101 - 110 kV - 200 mAs
	111 - 125 kV -100 mAs
Shortest exposure time	4mS
Max exposure time	3200 mS
Max dose/h	2000 mAs/h at 90 kV
Radiation leakage	<500 uGy/h at 2000 mAs/h, 125 kV
Total filtration without additional filter	>2.5 mm Al - <3.5 mm Al ( depending on configuration )
Maximum symmetrical radiation field	47 x 47 cm
X-ray output 40 kW version	40 kW at 100 kV 10 mS
	32 kW at 100 kV 50 mS (16 mAs)
	20 kW at 100 kV 100 mS ( According to IEC 60601 )
	25 kW at 125 kV 50 mS (10 mAs)
	18 kW at 125 kV 100 mS
X-ray output 32 kW version	32 kW at 100 kV 50 mS (16mAs)
	20 kW at 100 kV 100 mS ( According to IEC 60601 )
	25 kW at 125 kV 50 mS (10 mAs)
	18 kW at 125 kV 100 mS
X-ray output 20 kW version	20 kW at 100 kV 100 mS ( According to IEC 60601 )
	18 kW at 125 kV 100 mS

TECHNICAL DATA	SPECIFICATION
<b>Miscellaneous</b>	
Indication lights, type	LED
<b>X-ray Tube</b>	
Model	SFT M1
Weight	11.6 kg
Voltage	40-125 kVp (40 - 133 kVp as option)
Focus size	0.4/1.3 or 0.6/1.3 mm
Anode angle	13.5°
Anode capacity	150 kJ (200 kHU)
Anode heat dissipation	max 200 W
Minimum filtration	1.0 mm Al equivalent
Rotation speed	70 Hz
X-ray housing heating capacity	450 kJ
X-ray housing heat dissipation	Max 50 W
Colling speed of the anode	25 kHU/min
Heat capacity of the X-ray tube	500 kHU
The power of a small focus	11 kW
The power of a large focus	32 kW



TECHNICAL DATA	SPECIFICATION
<b>Image System</b>	
Type	CS-7 Konica Minolta software
	Canon CXDI Control Software NE
PC	Intel NUC, i5, 2.3 - 3-8 GHz, 8 GB Ram,
	Wifi and 256 GB SSD, Windows 10 Enterprise
<b>Collimator</b>	
Type	Manual, single layer
Lamp type	LED
Laser	Class 1
Minimum filtration	1.6 mm Al equivalent
Light output	Light output > 20 foot-candle @ 40 Inch, equals 215.3 lumen per square meter. Edge contrast is 4:1
<b>Image receptor</b>	
Applicable types	Digital (DR), Computed radiography (CR), Film
Storage (2x)	17"x17", 14"x17", 10"x12"
Automatic detector charging when stored inside the mobile unit	
Integrated detector and grid storage in mobile unit	
<b>Operator screen</b>	
Type	TFT - LCD LED Backlight
Active screen size	17" (432.75 mm) diagonal
Pixel pitch	0.264 mm x 0.264 mm
Pixel format	1280 horiz. By 1024 vert.
Color depth	16.7 M colors
Luminance (monitor only)	White: 400 cd/m2 (center 1 point, type.)
Luminance (calculated monitor with touch)	350 cd/m2
Touch transmission	Min.91%
Viewing angle (CR>10)	R/L 179 (type.) U/D 178 (type.)
Contrast ratio	1000:1
Touch type	Capacitive

## AMBIENT ENVIRONMENT

TECHNICAL DATA	SPECIFICATION
<b>Operation</b>	
Temperature	10 °C - 30 °C
Relative humidity	30 - 75%, non-condensing
Atmospheric pressure	800 - 1060 hPa
<b>Storage and transportation</b>	
Temperature	4° - 122°F (-20 °C to 50 °C)
Relative humidity	10 - 90 %, non-condensing
Atmospheric pressure	> 100 - 1060 hPa
<b>User interfaces</b>	
Adjustable height of drive handle 120 mm (4.7")	
Indication light (sides and column top)	
Exposure indication light	
Precision drive joystick (body and tube head)	
Collision protection (front, tube and monitor)	
<b>Options</b>	
Wireless remote control for exposure and collimator light	
Dose Area Meter (integrated inside collimator)	
Keyless entry	
Detector lock	
Pediatric version: color scheme	
Additional fixed or removable filters	



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