



JOLLY 30 *Plus DR*

Product Data **Digital mobile radiographic unit**

X-RAY GENERATOR

High Frequency monobloc	
Maximum power	30 kW (300 mA - 100 kV @ 100 msec)
Maximum voltage	125 kV
Maximum mAs	300 mAs
Monobloc thermal capacity	600 kJ (800 KHU)
Monobloc maximum thermal dissipation	55 W
Frequency	40 kHz
kV ripple	< 2%
Leakage radiation (IEC 601-1-3)	< 1 mGy / h
Total filtration	> 2.5 mm Al @ 75 kV

X-RAY TUBE

Rotating X-ray tube	IAE X22
Focal spot size	0.6 mm - 1.3 mm (10 kW / 30 kW)
Maximum voltage	130 kV
Anode speed	3000 r.p.m.
Anode material	RTM
Anode angle	15°
Anode maximum heat dissipation	80 kJ (107 KHU)
Maximum continuous anode heat dissipation	300 W

CONTROL CONSOLE

Microprocessor controller console	
Display	<ul style="list-style-type: none"> • Type: 5.7" Colour TFT LCD touch screen display • Resolution: 320 × 240 pixels
Alarm	Acoustic and luminous X-ray emission alarm
APR	Languages available <ul style="list-style-type: none"> • Italian • English • Spanish • French • Russian • German • Bulgarian • Vietnamese • Turkish

OPERATION MODE

3-point operation (kV – mA – time)	kV selection: from 40 to 125 kV [1kV step]
	mA selection: from 50 mA to 400 mA [11 steps]
	Time selection: from 0.002 sec to 6 sec [34 steps]
2-point operation (kV – mAs)	kVp selection: from 40 kV to 125 kV [1 kV step]
	mAs selection: from 0.5 mAs to 300 mAs [26 steps]
Anatomical programming	170 stored techniques
Compensation levels	5 patient's thickness compensation levels
Output	RS232 for software updating

EXPOSURE CONTROLS

Two modalities	With two push buttons on control console
	Two-step hand switch complete of spiral cable extendable up to 3.8 meters.



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SAFETY AND PROTECTION

Automatic control and protection of the filament current

Over current protection
 Overvoltage protection
 X-ray tube overload protection
 Monobloc kHU automatic survey
 Errors description

COLLIMATOR

Manual collimator

Adjustment from 0x0 to 43x43 cm at 1 m focal distance (FFD)
 High intensity lamp (160 lux) for X-ray field simulation and automatic switch off after 30 sec.
 Retractable tape measure for FFD measurement
 $\pm 90^\circ$ collimator rotation

MOBILE STAND

Antistatic rubber wheels

Dead-man operated parking brake
 Variable focus-floor distance from 400 mm to 2000 mm
 Monobloc yoke support rotation: $+90^\circ / -90^\circ$
 Monobloc rotation in the yoke: $-57^\circ / +167^\circ$
 Overall dimensions in transport position 106 x 68 x 158 (H) cm
 Weight (without FPD): ~ 180 kg

POWER SUPPLY

Voltage: 230 Vac single phase

Frequency: 50 Hz (60 Hz on request)
 Current consumption: 16 A maximum
 Total line resistance: 0.40 Ohm maximum
 Automatic line compensation: $\pm 10\%$

On request:
 Voltage: 115 Vac single phase
 Frequency: 60 Hz
 Current consumption: 25 A maximum
 Automatic line compensation: $\pm 10\%$



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Digital Image System

Digital imaging system for acquisition, reconstruction and image display. Image processing technology utilizes the lowest possible dose in delivering optimum image quality. Optimized workflow for faster patient throughput

SOFTWARE

Software Features

- User-friendly GUI for easy navigation
- Selectable advanced image enhancement (AIE) for optimal image brightness, contrast and edge enhancement
- Over 500 pre-loaded exam profiles
- Export image to BMP or JPG files
- Auto Region Of Interest (ROI) for optimal display of selected image area
- Automatic image optimization based on customizable acquisition profiles
- Multiple image display (4 on 1 and 16 on 1)
- Thumbnail image display
- Accept/reject functionality
- Auto-system calibration
- "True size printing" – Capability for accurate representation of anatomical size
- Images can be sent to printer, PACS, usb storage memory or cd/dvd
- Background multi-tasking hardcopy, allows simultaneous processing and printing during acquisition
- Language: English, French, Spanish, German, Italian, Portuguese

Image Processing Software

- Brightness and contrast adjustment
- Automatic shutters
- Zoom and pan
- Rotation and image flip
- Measurements tools
- Annotations and pointers
- Positive-negative image
- Tech initials

DICOM 3.0 Network Interface

Dicom 3.0 network interface kit includes

- Print class
- Storage class
- MPPS (Modality Perform Procedure Step)
- Storage commitment class
- Query / Retrieve
- Worklist

IHE Integration Profiles

- Scheduled Workflow
- Patient Information Reconciliation
- Portabel Data for Imaging
- Key Image Note
- Consistent Presentation of Images
- Consistent Time



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PANEL PC

Processor	Intel Core 2 Duo Processor
Memory	2 GB DDR2 @ 400 MHz
Hard Disk Drive	SATA Hard Disk Drive 250 GB
DVD-R/RW CD-R/RW combo drive	Yes
Operating System	Windows XP Professional for Embedded system
Local storage of uncompressed images	>10000
Preview Image	6 seconds
Full Post Processed Image	<10 seconds

DISPLAY

Screen Technology	True Color TFT LCD
Touch screen	5-wire resistive/ 2040x2048
Active screen size	483mm (19")
Active screen size (H x V)	377 x 304 mm
Resolution	1 MegaPixel (1280 x 1024)
Display color	16.7 M
Viewing angle (H,V)	70°(H)/170°(V)
Luminance	380 nits
Contrast ratio	1000:1

ACCESS POINT (OPTION WITH FPD WI-FI)

Cisco Aironet 1240AG Series	
Network Type	Isolated Private Wireless LAN (WLAN)
Wireless Protocol	802.11 Draft n
Security	WPA2-PSK AES
Dimension	16.76 x 21.59 x 2.79 cm



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**STANDARD TETHERED
FLAT PANEL DETECTOR**

Receptor Type	Amorphous Silicon with Charge Well Pixel™ Tech
Conversion Screen	DRZ Plus Gd2O2S:Tb (Gad Ox)
Total Area	35.6 x 42.7 cm (14.0 x 16.8 inch)
Active Area	35.3 x 42.4 cm (13.9 x 16.7 inch)
Pixel Size (µm)	139
Total Pixel Matrix	2560 x 3072
Active Pixel Matrix	2540 x 3052
Limiting Resolution	3.6 lp/mm
Energy Range	40 – 150 kVp
Scan Method	Progressive
A/D Conversion	14 bit
Cycle Time (Minimum / Standard)	8 / 10 sec
Fill factor	100 %

Interfaces

Tethered	10/100 Ethernet
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Physical Characteristics

Size	49.2 x 47.5 x 2.3 cm (19.4 x 18.7 x 0.9 inch)
Weight (with 8mt cable)	(6.4 ± 0.2) kg
Housing Material	Molded Polycarbonate

Environmental

Shock	High-shock tolerance
Operating Temperature Range	+10 ° ÷ +35° C
Storage Temperature	-20° ÷ +70° C
Humidity (non condensing)	10 to 90 %

Power

Power dissipation	Max 35 W
Power Supply	100 ÷ 240 Vac — 50/60 Hz



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OPTIONAL:

**FLAT PANEL DETECTOR
WI-FI**

Receptor Type	Amorphous Silicon on glass - no tiling
Conversion Screen	Detached Gd2O2S:Tb (Gad Ox)
Active Area	354 x 425 mm
Pixel Size (µm)	139 x 139 (Nyquist = 3.6 lp/mm)
Pixel Matrix	2544 x 3056
Limiting Resolution	3.6 cyc./mm
MTF (5 cyc/mm)	83 % Typ.
DQE (0.5 cyc/mm)	31 % Typ.
Energy Range	40 – 150 kVp
Scan Method	Progressive
A/D Conversion	14 bit
Cycle Time (Wireless connection)	Shot to Shot 20sec.

Interfaces

Wireless	802.11 Draft n
Tethered	10/100 Ethernet

Physical Characteristics

Size	35 x 43 cm Cassette 383x459x15 mm
Weight	3.86 Kg
Housing Material	Aluminium
Sensor Protection Material	Carbon Fiber and Aluminum Plate
Weight Limit Applied to a single 5 cm point	23 Kg
Distributed evenly over the detector area	125 Kg

Battery

Technology	Lithium-polymer Technology
Voltage/Energy	14.8Vdc, 2.1Ah (nominal) capacity
Images per Charge	~90 images in 4-6 hr period
Expected Life	500 charge/discharge cycles
Battery Charger	100-240 Vac, 50/60Hz, 1.0A



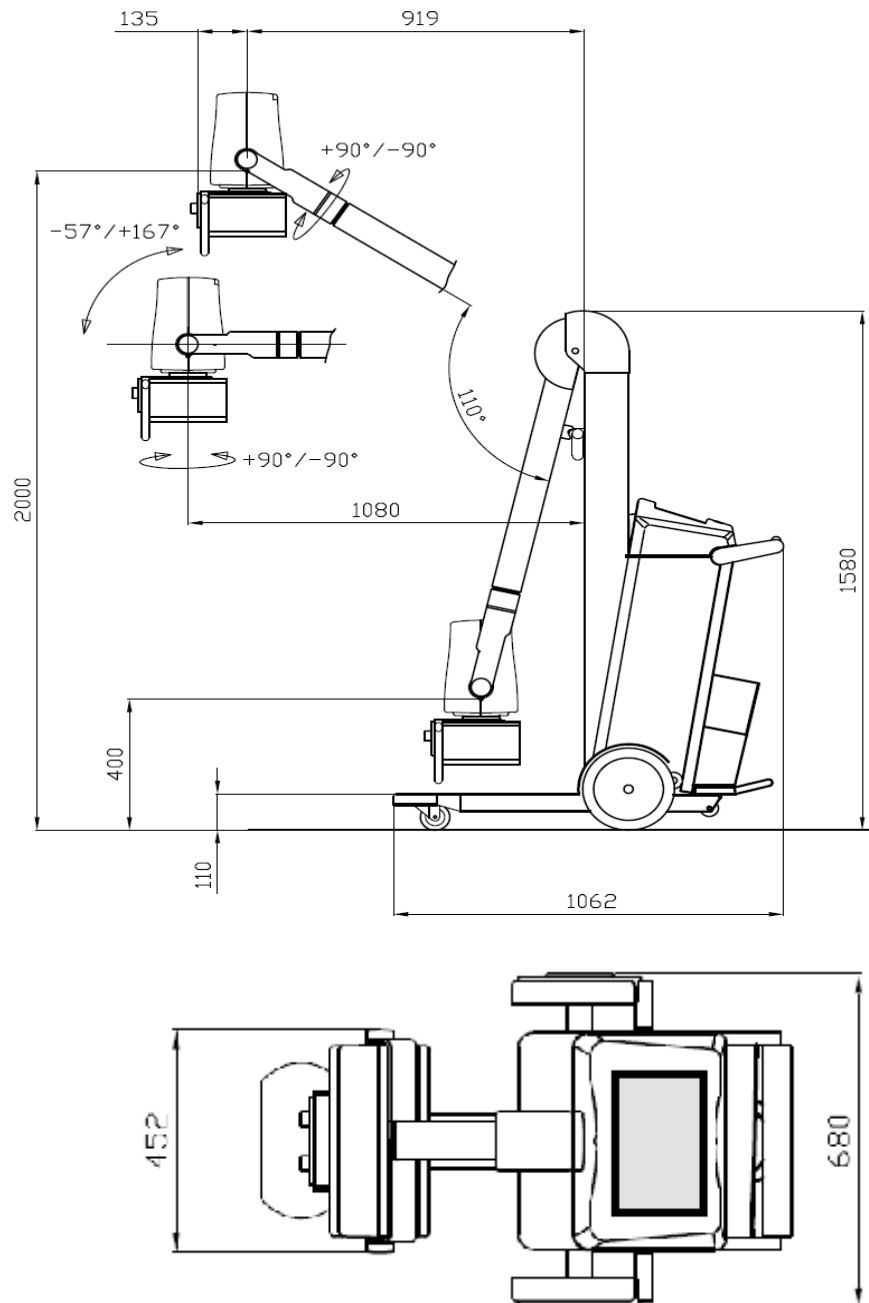
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