



ACCESS TO VIEW MORE...



APPROVED BY
AERB & BIS

1.5K²

Image chain



A Comprehensive Surgical Imaging Experience

Happier Living Everyday



Follow us @bplmedtech



www.bplmedicaltechnologies.com

Technical Specifications

Parameters			Specification
X-RAY GENERATOR			
Max. Output			3.6 KW
Frequency			110 kHz
Operating modes	KV Range	mA Range	
Continues fluoroscopy mode	40 – 110	0.1 to 4mA	
Boost Mode	40 – 110	4 to 15mA	
Pulse Mode - Normal	40 – 110	1 to 15mA	2,4,6,8 PPS
Snap Mode	40 – 110	4mA to 20mA	
Rad Mode	40 - 110	Upto 70mA	1 – 200mA s
RAD APR: _16___Programs			

X-RAY TUBE	
Focal Spot Nominal Value (Small / Large)	0.6/1.5 mm ²
Anode type	Stationary
max. tube Current	80 mA
Anode heat Content	42 KHU
Max. Anode heat dissipation Rate	200 W
Housing Heat capacity	306KJ = 428KHU
Housing Cooling Rate	7 degree C / 30 Min
Total Filtration	≥ 3 mm Al
Leakage Radiation from Tubehead at 1 Mtr. From Tube Focal Point	<100 uGrey in 1 Hour
Safety Interlocks	For Max KV, Max mA, Max temp, Max fil

COLLIMATOR SYSTEM	
Fixed Collimation	Fixed Slot Collimation with beam limited to FPD size
Collimator	
Shutter diaphragm	For symmetrical collimation

IMAGE ACQUISITION MODES	
Fluoroscopy Mode	Continuous Fluoro with LIH
	Stationary
	Boost Mode
	Pulse Mode
	Snap Mode
Radiography Mode	YES

X-RAY DYNAMIC DETECTOR	
Detector size	21CMx21CM
Material	aSi with Csl scintillator
Dual Mode	21CM/11CM
DQE (0)	72%
Pixel Pitch	139 micron
Scan Depth	16 Bits
Grid	230x230 mm physical area, Ratio – 8:1, 60Lines/cm, FD : 1000mm

IMAGE PROCESSING	
Pixel Matrix	1.5K x 1.5K x 16 bit
Preset Imaging Profile	Multiple
Manual digital Contrast / Brightness control	Yes
Negate Mode	Yes
Horizontal/ Vertical flip	Yes
Noise reduction by means of recursive filter	Yes
Image Rotation	Yes. 90 degree/free hand
Zoom and Pan	Yes
Edge Enhancement	Yes
Last Image Hold	Yes
Print	Yes. Dicom / Non Dicom
F-Cine Play/Pause/forward/reverse	Yes
Text Annotations	Yes
Measurements	Distance, Angle, Area
DICOM 3.0 export	Yes
Export Images JPEG/BMP/PNG	Yes
Delete Images / Patient Records	Yes
Patient Registration	Yes. Emergency/Normal
Multiple Image View	Yes
Auto Image save	Yes
Swap and Auto swap feature	Yes
Connectivity Features	Wired Ethernet/USB data transfer/ CD-DVD drive/PACS Connectivity
Internal Storage	1,00,000

Technical Specifications

CONTROL PANEL

Display Type	Full Touch, Graphical, Coloured
Size	7"
Image Management features	Yes
Collimation Control	Yes (Optional)
Laser Aimer Pointer	Yes
Display of errors on console	Yes
Fluoro Timer / Reset	300 Sec
Audible Exposure Indication	Yes for high dose mode

DOSE REDUCTION FEATURES

Laser Aimer (Detector side)	Yes
Pulsed Fluoroscopy	Yes
Auto Dose Mode	Yes

OTHER FUNCTIONS

Emergency Stop	Yes
Dual Foot Switch/ Hand Switch	Yes
Laser class	Class-1
Type of LASER	Laser DIODE
Wavelength	650 nm
Laser colour	RED
Laser Power	Less than 1W

DETACHABLE PARTS

Hand switch	Yes
Footswitch	Yes
Buggy and Monitor Trolley connection	Yes

ENVIRONMENTAL CONDITIONS (OPERATION)

Temperature range	+ 15°C to + 30°C
Relative humidity	30% to 70%, non-condensing
Barometric pressure	700 hPa to 1060 hPa

ENVIRONMENTAL CONDITIONS (STORAGE)

Temperature range	+ 0°C to + 45°C
Relative humidity	30% to 90%, non-condensing
Barometric pressure	700 hPa to 1060 hPa

BPL **RAY**[®] Pro Plus
Series: **FD** (A Flat Panel C-Arm)



MECHANICAL CHARACTERISTICS

Vertical Run	400 mm
Horizontal Run	200mm
Wig-Wag (Swivel Range)	± 12.5°
Arc Rotation around Horizontal Axis (Angulation)	±190°
Orbital Movement (Over-scan)	130° (– 40° to + 90°)
S.I.D	1050mm
Arc Depth	630 mm
Usable Space between X-Ray Tube Head and FPD (Free Space)	805 mm
C-Arm Dimensions (LxWxH) - at maximum positions	???
Wheelbase width	800mm
Locks for Rotation, Swivel & Arc Orbital movements	Yes
Weight	290 Kgs Approx
Actuator assisted Motorised noise-free Up/Down movement	Yes
Foot Switch Holder	Yes
Foot Lock to immobilise the C-Arm	Yes
Wheels with Cable Deflector	Yes. Rear wheel
Steering wheel with Rotation	Yes, 90 deg

Technical Specifications

TROLLEY/Workstation

Option - 1

Display : LED	32" QHD display
Image display pixels	2560x1440
Brightness	350 cd/m2
Cart Dimensions (LxWxH)	464 x 400 x 1764
X-Ray Indicator	Integrated
Isolation transformer	YES
Weight	150 Kg Approx.

Option - 2

Display : LED	31.5" 8MP Colored Medical Grade
Image display pixels	3840x2160
Brightness	450 cd/m2 or better

CLASSIFICATION OF THE PRODUCT

Type of protection against short circuits	Class I Unit
Use Conditions	Continuous working with intermittent load
Unit not to be used in flammable anaesthetized environment	Yes

REGULATORY CERTIFICATIONS

Regulatory Approvals	BIS, AERB, CDSCO
----------------------	------------------



ELECTRICAL CHARACTERISTICS

Single phase voltage	100V - 240VAC, +/-10%
Frequency	50Hz/60Hz
Absorbed Current	Fluoroscopy - 11A@230V Radiography Mode - 22A@230V
Line Compensation	Automatic
Line Resistance	0.4 Ω or Lesser.
Plug Standard	As per country specific

BPL CRAY Pro Plus Series FD, Service is Powered by



Service Helpline
1800-425-2355
9AM - 8PM (Monday - Saturday)

ISO 13485:2016 CERTIFIED COMPANY
ISO 9001:2015 CERTIFIED COMPANY

BPL MEDICAL TECHNOLOGIES PRIVATE LIMITED

Registered office: 11th KM, Bannerghatta Road,
Arakere, Bangalore - 560076, India
Phone +918 02 6484388/ 2643 350
Toll Free 1800-425-2355
Website www.bplmedicaltechnologies.com
CIN:U33110KA20212PTC067282
For Enquiries: sales.medical@bpl.in



Happier Living Everyday