

# BPL RAY<sup>®</sup> Prime

X-MED 1K<sup>2</sup>

**BPL** Medical  
Technologies



Approved by  
**AERB & BIS**

[www.bplmedicaltechnologies.com](http://www.bplmedicaltechnologies.com)



*Happier Living Everyday*

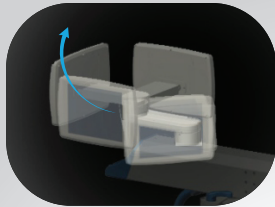
## *A World Class Surgical Imaging Experience*



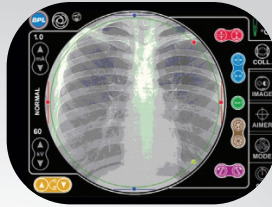
Follow Us on



# Enhanced User Experience



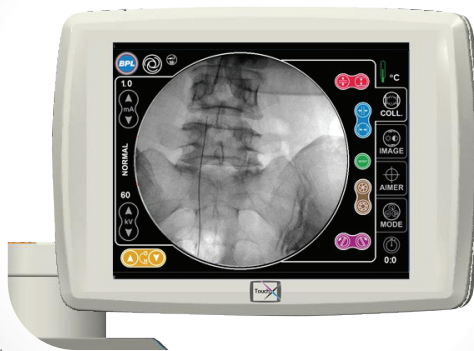
**Ergonomic Touch Panel**  
10" Touch Panel with Tilt & Swivel enables better viewing for the operator



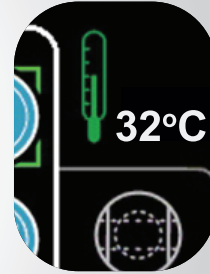
**Digital Preview Collimation<sup>+</sup>**  
Position the collimator by virtually adjusting the blade positions on touch screen LCD panel & save yourself from unnecessary radiation exposure



**Real-Time Image Management**  
Access to Image improvement features ie: Noise Reduction, Edge enhancement, Image Rotation, Image Inversion & Reference Image



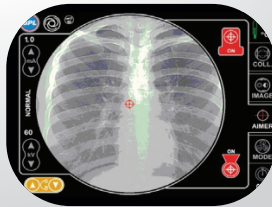
**Large 10" intuitive touch panel control**



**Real-Time Heat Monitoring**  
The technician can visualise monoblock thermal status in real-time on the Touch Panel



**Live & LIH Fluoro**  
Live & LIH Fluoroscopy Image display at Control Panel for accurate C-Arm positioning with no retakes



**Advanced Laser Aimer<sup>+</sup>**  
Access to Laser aimer operations with Pointer display on Live / LIH Image



## Reduced Radiation Exposure for Patients and Clinicians



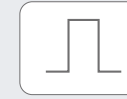
**Digital Preview Collimation<sup>+</sup>**  
Collimator preview without X-ray exposure helps in dose reduction



**Laser Aimer**  
For fast and radiation free positioning from control panel



**Auto Mode**  
Automatic dosage control to adjust systems exposure automatically as per body's region



**Low rate Pulsed Fluoroscopy**  
Available for significant dose reduction



**Dosimetric indications**  
Dose rate & commulative dose



**Stray Radiation**  
Leakage radiation is virtually eliminated

# Experience the World Class 1K x 1K Surgical Imaging



## The Holistic 1K x 1K Digital Imaging Chain

BPL C Ray Prime is Powered by X-MED 1K<sup>2</sup> Digital Imaging Chain which ensures that the quality of the image is enhanced at every step, thus providing you an holistic Surgical Imaging experience



## Streamlined Workflow

	<p><b>Image Management</b></p> <ul style="list-style-type: none"> <li>Access to Image Management Features from the Control Panel</li> <li>Real time brightness/ contrast</li> <li>Noise Reduction Level (2,4,8,12,16)</li> <li>Negative, Mirror, Flip, Edge enhancement &amp; Image Rotation</li> </ul>
	<p><b>Patient Data Management</b></p> <ul style="list-style-type: none"> <li>Patient Data entry facility</li> <li>2,00,000 image storage capacity</li> <li>Mesurements and annotations</li> <li>Cine loop recording &amp; storage</li> </ul>
	<p><b>Productivity</b></p> <ul style="list-style-type: none"> <li>Quick response in auto mode</li> <li>Multiple operating modes</li> <li>TouchX Control panel for enhanced user experience</li> <li>Alphanumeric Keyboard</li> </ul>
	<p><b>Connectivity</b></p> <ul style="list-style-type: none"> <li>Data export: USB, DVD, DICOM &amp; LAN</li> <li>DICOM 3.0 send</li> </ul>

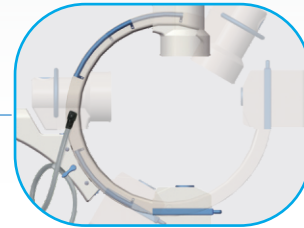
# Superior Ergonomic Design for Effortless Operations



Intelligent Steering Mechanism with rear wheel rotation



Low Lateral Height ensures operator comfort by minimizing the need for table movement



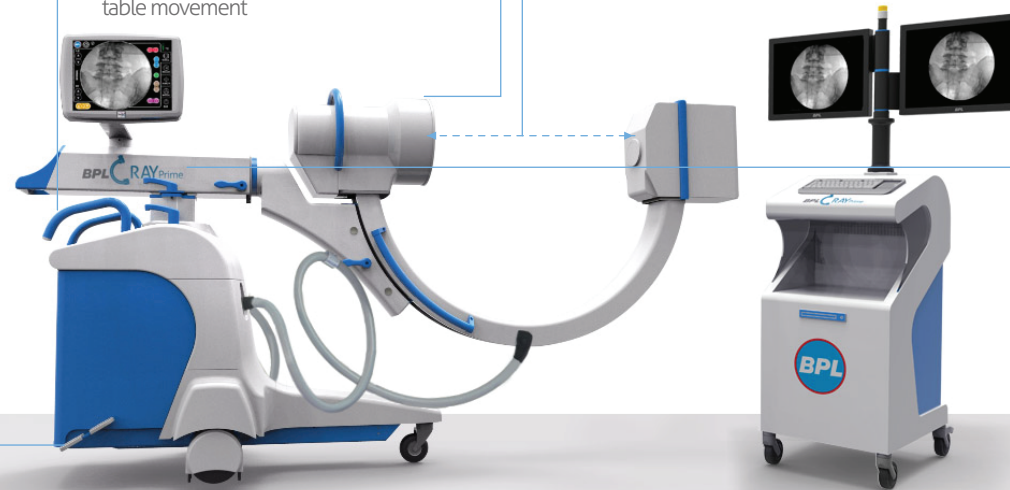
Arc Depth of 63 cm and clearance of 76 cm for unobstructed patient access



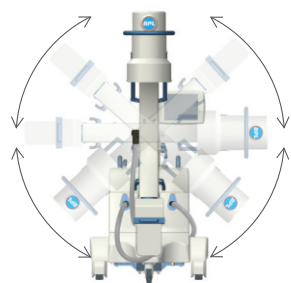
Modular Workstation with dual foldable high resolution monitors & spill proof keyboard



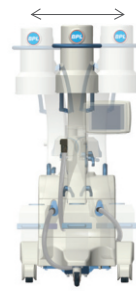
Efficient Foot Brake is located on right side of the console



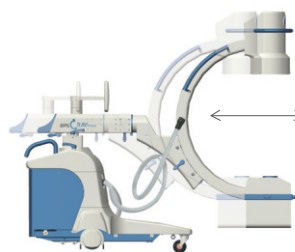
Effortless quarter turn locking mechanism.  
Aluminium extruded "Rust Free" vertical column for silent up/down movement



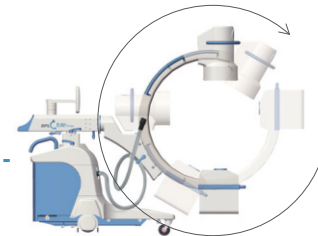
± 210° Axial Rotation



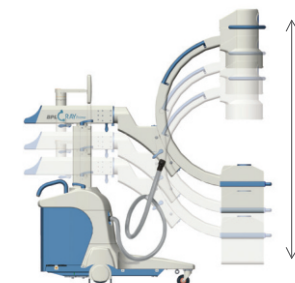
± 12.5° Wig Wag Movement



200 mm Horizontal Movement



-30° + 90° Orbital Rotation



450 mm Vertical Movement



# Technical Specifications

## X-Ray Generator

Type	High Frequency; 40KHz
Output	<b>3.5 KW</b>
KV Range	
(Fluoroscopy / Radiography)	40 - 110 KVp
Fluoroscopy mA	0.1 - 3mA
Boost Mode	Up to 7.5 mA
Radiography mAs	1 - 200 mAs

## X-Ray Tube

Focal Spot Nominal Value	
(Small / Large)	0.6/ 1.5mm <sup>2</sup>
Collimation System	
Iris diaphragm <sup>†</sup>	For Concentric, radiation free collimation
Parallel Shutter with Rotation <sup>†</sup>	for Symmetric, radiation free collimation

## Control Panel

Display Type	Full Touch, Colored Graphical Display
Display size	10"
Touch Panel Arm	360 degree swiveling facility & Tilting Facility
Operating Modes	Continuous Fluoroscopy Mode Pulsed Fluoroscopy Mode Boost Fluoroscopy Mode Snapshot Mode Auto Mode Radiography Mode

## Image Intensifier

Type	9Inches; Triple Field (9"/6"/4.5")
Grid	Round, 9"- 10:1, 103 Lines, FD: 36-39"

## Camera

Type	1/2" CMOS, 1024 x 1024 Pixels, GigE output
------	--

## Image Memory

XMED 1K <sup>2</sup>	PC Base Advanced Image memory with Real-time & Post-processing features; storage upto 2,00,000 images DICOM 3.0, USB Export, DVD R/W & Dose display
----------------------	---

## Mechanical Characteristics

C-Arm Dimension	
Vertical Run	450 mm
Horizontal Run	200 mm
Wig-Wag (Swivel Range)	± 12.5°
Angulation	± 210°
Orbital Movement (Over scan)	120° (- 30° to + 90°)
S.I.D	960 mm
Arc Depth	63 cm
Clearance	76 cm

## Workstation (Modular)

Displays ; LCD Monitors	: 19" Flicker-free with LED backlight : Medical Grade Monitor <sup>†</sup>
Foldable Display	Yes

## Other Functions

Emergency Stop	
Foot Switch	
Equipment Malfunction Indication	

## Electrical Characteristics

Single phase voltage	230 ± 10% V AC, 50 Hz
----------------------	-----------------------

## Designed for Safety & Reliability

*C-RAY Prime is equipped with comprehensive safety features which ensures that your C-ARM's performance is at its best and provides you with maximum Uptime*

- *Automatic shut off to prevent over-heating of the Equipment*
- *Emergency Stop switch for manual shut off*
- *Complete shielded wiring and EMI protection*
- *Isolation Transformer safeguards the equipment from power surge, Spike, fluctuation and the operator from electric shocks*

Powered by



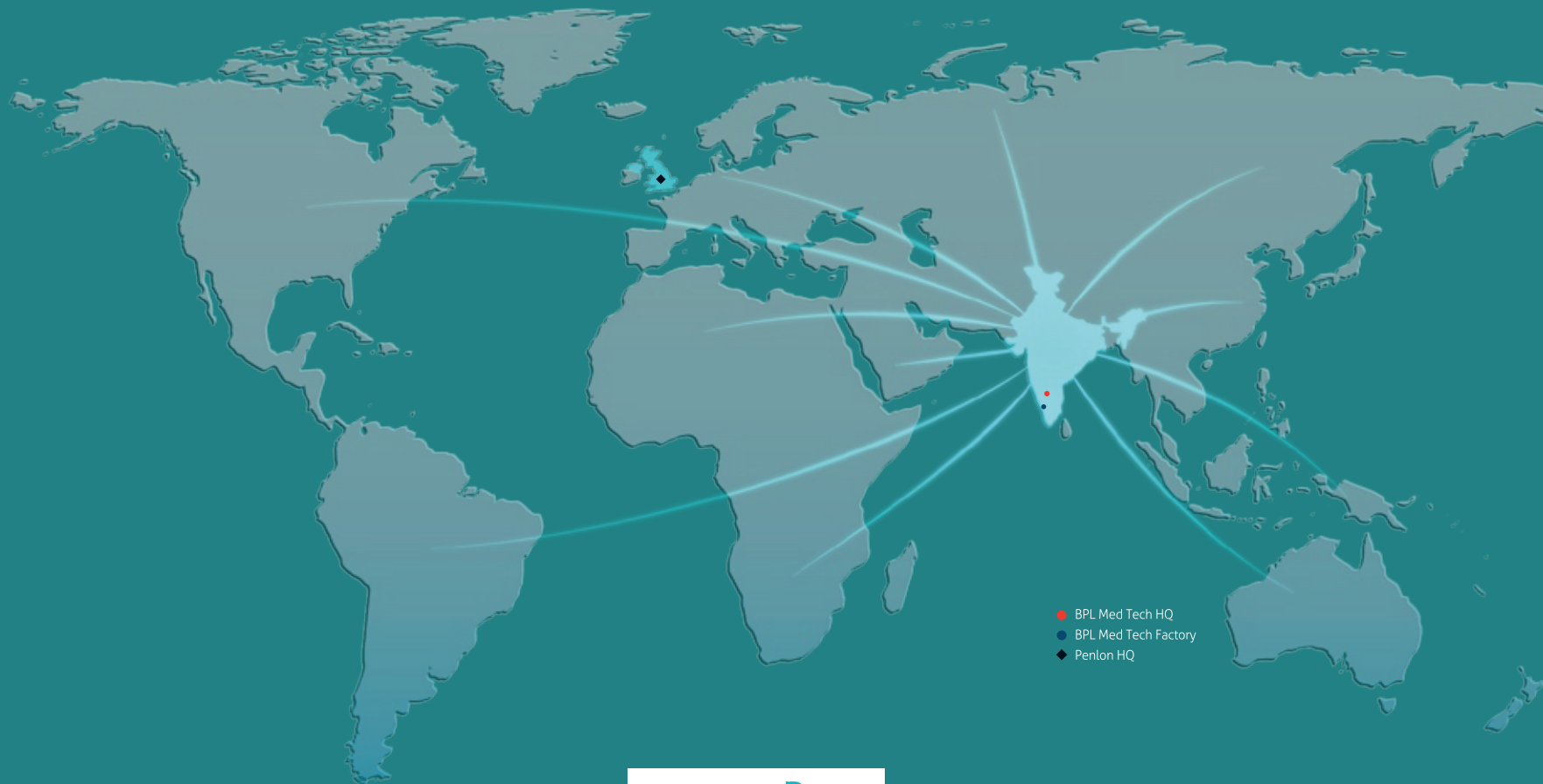
**We Engineer Uptime**

**Service Helpline  
1800-425-2355**

*Designed to meet IEC 60601 safety standards, AERB regulations and BIS IS 7620 Part 1*

+ Optional Features

# A Global Medical Technology Company



- BPL Med Tech HQ
- BPL Med Tech Factory
- ◆ Penlon HQ

Service is Powered by:



Service Helpline  
**1800-425-2355**

## CERTIFIED ISO 13485 : 2016 COMPANY

### BPL MEDICAL TECHNOLOGIES PRIVATE LIMITED

Registered office: 11th KM, Bannerghatta Road,  
Arakere, Bangalore - 560076, India  
Phone +91 80 26484388/ 2648 4350  
Toll Free 1800-425-2355  
Website [www.bplmedicaltechnologies.com](http://www.bplmedicaltechnologies.com)  
CIN:U33110KA20212PTC067282  
For Enquiries: [sales.medical@bpl.in](mailto:sales.medical@bpl.in)



*Happier Living Everyday*