

Premium HD Endoscopic Imaging System



LUCERNA Premium HD

Advanced Endoscopic Imaging System

PHD Camera System

Premium HD, purpose-clear.

Premium HD gives you the surgical view you trust. A crystal-clean 1080p, state of the art image processing, and low-noise imaging. Built for precise decisions, smoother cases, and better patient care. Engineered with international imaging expertise and robustness, this imaging chain elevates “just Full HD” to “Premium HD”.



PURPOSEFULLY ENGINEERED CAPABILITIES



Lucerna™ Premium HD No second guesses

With our **TrueChip™** sensor, you see what matters at a glance. Clean planes, Honest color, and the quiet confidence to move forward.



Premium HD Recording

Still and videos slot into clean case wise folders with time markers. Teaching and case notes just got easier.



Color you can trust

Consistent, lifelike tissue tones across scopes, rooms, and specialties. Tissue tones feel natural so subtle cues stand out without over-processing.



Biggest in Class touchscreen

Big targets, glove-friendly, and brilliantly simple. Surgical presets, zoom, recordings, freeze and snapshots are one tap away so your operative flow is uninterrupted.



Calm in the peritoneum

When things heat up; irrigation, cautery, smoke; the image stays composed and readable. And the surgeon is in control of the procedure.



LumiFlux AI™ Quietly reduces fatigue

A comfortable, believable picture lowers visual strain, so focus lasts as long as the case. Glare behaves. Shadows cooperate.



Focus and Forget™ Premium HD Optics

Smooth in, smooth out. Focus holds as you zoom in or out, so planes stay stable and decisions stay quick.



Premium HD Specialty Modes

Nine calibrated surgical modes co-designed with faculty experts to meet your visual requirements available with a single tap.



Hands-on speed, eyes-up focus

White balance, Freeze frame, screenshot and record on the camera head. Correct and capture the frame you need without taking your eyes off the field.



Low-noise, high-fidelity imaging

Industry leading signal to noise ratio plus high-fidelity sensing equals clean, detailed images. Micro-textures pop for confident tissue differentiation, even in challenging conditions.



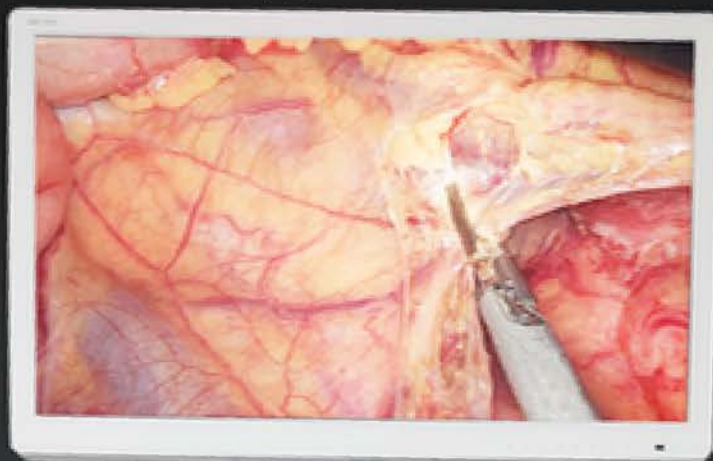
TRUE COLOR: HUMAN EYE FIDELITY



PERCEPTUAL 3D



NO DARK AREAS (HDR)



LUCERNA WORKSTATION

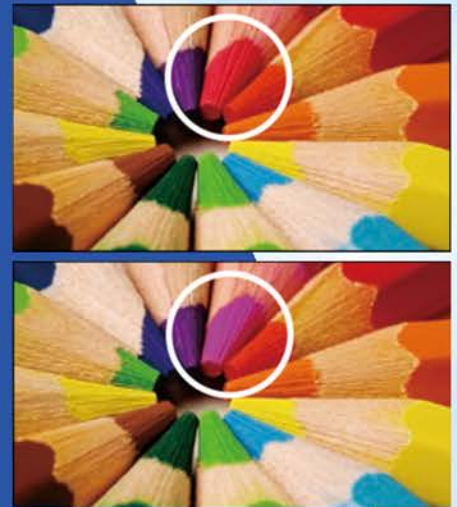
Why Premium HD

**“Where cameras see similarity,
the human eye sees distinction.”**

Even the most advanced sensors struggle to match the human eye's color differentiation. Our imaging system is designed to close that gap.

TrueChip™ sensor along with LumiFlux AI™ and the Lucerna™ imaging engine preserve the natural richness, depth, and subtle tonal variations surgeons rely on for confident decisions. Leading to

- Clearer Views
- Fewer Decision Timeouts
- Tighter Operating Rhythms



VALUE ADDITION FOR ALL STAKEHOLDERS



SURGEONS

- Faster, more confident calls from Premium HD clarity and low noise
- Imagine designed for precise visualization and efficient case flow
- One-tap modes for specialty views
- Thumb-accessible freeze, record and white balance for smoother workflow



OR TEAMS & HOSPITALS

- Simple front panel buttons (AWB, freeze, Scene) reduce fiddling; instant standby wake for safe changes
- Medical-grade build, IEC 60601-1 Class I emissions
- Modular recorder keeps rack tidy and scales documentation



PATIENTS

- Fewer interruptions, smoother progress leads to less anesthesia time
- High-quality capture aids documentation and follow-up
- Shorter surgeries enable faster recovery

ACCESSORIES



27"/32" LUCERNA FULL HD MONITOR



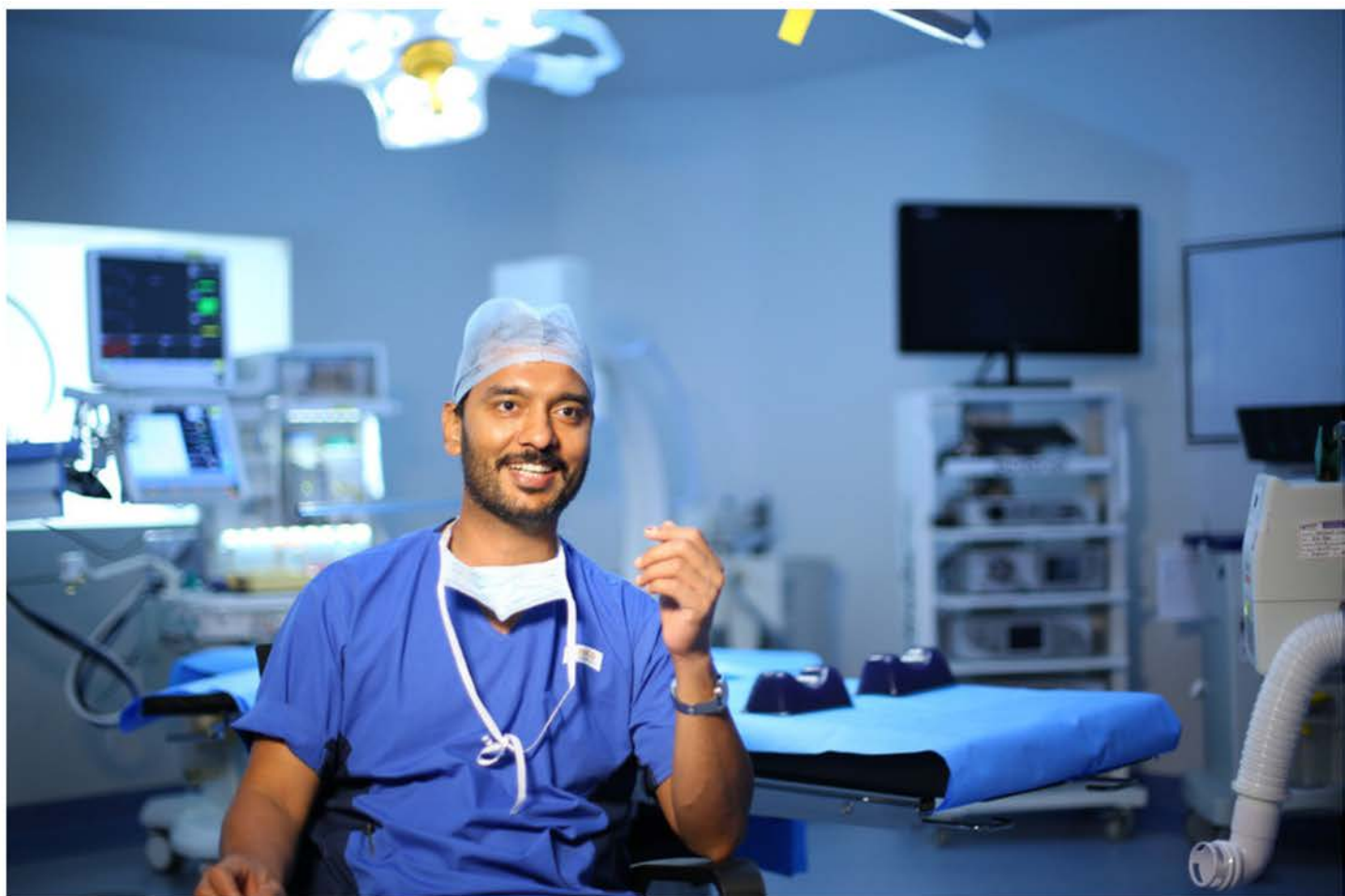
LUCERNA FULL HD SCOPES



ENVOLITE LIGHT SOURCE



LUCERNA ENDOCART



SPECIFICATIONS

PHD Camera Control Unit	
Parameter	Specification
Power	240V DC
System resolution	1080p
Output frame rates	60 Hz
Video I/O	3G-SDI x 2 , DVI x 1
Compression / recording	H.264, AVI video and JPEG stills to USB media USB 2.0 x 2 (front and rear)
Image controls	9 Faculty specific modes: Standard, ENT, Gynec, Ortho, Laparo, GI, Uro, Uro-Fibroscope, Neuro-Spinal
PHD Camera Head	
Parameter	Specification
TrueChip™ Sensor	High Low light Sensitivity, Large Foot print, High Pixel Density
Effective pixels	1920×1080 effective
Native output resolution	1080p
Minimum illumination	≤ 0.5 Lux
SNR	56 dB
Electronic zoom	8 levels (0.5× to 4.0×)
Buttons	4 programmable (AWB, record, capture, freeze)
Ingress Protection	IPX7
Size / weight / cable	109×50×49 mm; 300 g (incl. cable); 3.0 m highly-flex cable
Optical mount	F22 optical interface (bayonet to coupler)

SPECIFICATIONS

Laparoscope (Rigid, Reusable)	
Parameter	Specification
Viewing direction	30°
Working length	345 mm
Optical working distance (design)	10 - 50 mm
Field of view	90°
Effective depth of field	3–200 mm
Insertion diameter (max)	10.0 mm
Useful life	Rated for 1000 sterilization cycles
Sterilization	Autoclave, Soaking
Coupler	
Parameter	Specification
Type	Parfocal
Focal Length	14-32 mm
Surgical Monitor	
Parameter	Specification
Native resolution	1080p
Input	3G-SDI x 1, HDMI 2.0 x 1, DVI x 1 for 1080p at 60 Hz
Sizes	27" , 32" variants
Color Modes	BT.709, BT.2020
Image controls	Individual color channel gain/ Brightness/ Sharpness/ Saturation/ Contrast and Gamma levels as per medical standards



ECLIPSE PRISM
MEDICAL DEVICES



30+ YEARS
MEDICAL DEVICE
MANUFACTURING EXPERIENCE



50+
MEDICAL DEVICES



10,000+
OPERATING
ROOMS



10 MILLION
ACTIVE USERS

Our Brands



Certifications and Compliances

ISO 9001:2015



ISO 13485:2016



ICMED 13485



CE



CDSCO



For more information on sales, please call us on +91 9769369129 or mail us at info@epmdgroup.com