ConVida
Healthcare & Systems

VIDA LED Surgical Lighting System,
X Series and Visualization Solution

Superior Illumination

Daylight Color, True Color Vision

VIDA X series surgical light uses single chip, phosphor-based high efficacy LEDs as its light sources. The lighting system generates a comfortable color temperature of 4200 Kelvins with CRI 95 and R9 95. The characteristics help reveal the maximum perceivable detail of tissues while eye comfort of the surgeon is greatly improved.

Cool and Bright

VIDA X70 lighthead delivers 160,000lux of cool light to the surgical site that meets the expectations of the most demanding surgical specialties.

Excellent Long Distance and Depth Illumination

The specially engineered geometry of our LEDs creates unparalleled focal distance (L1+L2) of 157cm (61.8"). The design minimizes the effect of obstructions and gives good illumination into deep surgical cavities.

Innovation and creativity is always a goal and abiding belief of ConVida. We introduce VIDA X Series LED Surgical Lighting System and Visualization Solutions which are designed to provide excellent surgical lighting and outstanding visual integration solutions you need.

Flexible Configuration with Easy to Use Controls

▲ Model VIDA X70 / X50

Two Types of Ambient Lights

▲ ENDO Mode

▲ GUIDE Lighting Mode

Main and Satellite Design Provides Flexible Light Field Variations

VIDA X surgical lights can be supplied in "main" and "satellite" conjunctions to reduce shadow from the surgical team. Different light pattern (d10) variations of two sizes of lightheads offer the flexibility to adapt to a wide range of procedures.

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Focus and Pattern Size Adjustable through Sterile Handle Covers

The lighthead's focus can easily be adjusted by surgeons from the sterile field via turning the sterile handle cover. This control mechanism fits for the existing O.R. user habit.

▲ VIDA X lighthead control

Exceptionally Smooth Slider Bar Control

The intensity of each lighthead can be adjusted to 10 levels through the slider bar on the lighting controls. All lighting functions (e.g. on/off, intensity, ambient lights etc.) are controlled independently or simultaneously by activating SYNC/RESET push buttons.

Design

Compact Lighthead for Hygiene

Compact light housing with easy-to-clean surfaces makes efficient hygiene management possible.

Low Profile Suspension

Low-profile flat cardinal suspension can be offered for operating rooms with low room height.

HD Camera-ready Lighthead

▲ Camera module is Interchangeable from one lighthead to another.

All VIDA X series lightheads are pre-wired to take a plug-and-play optional HD camera module which employs 1080p Full HD video format, suitable for HD video transmission, documentation and recording.

HD Suspensions for ConVida Visualization Solutions
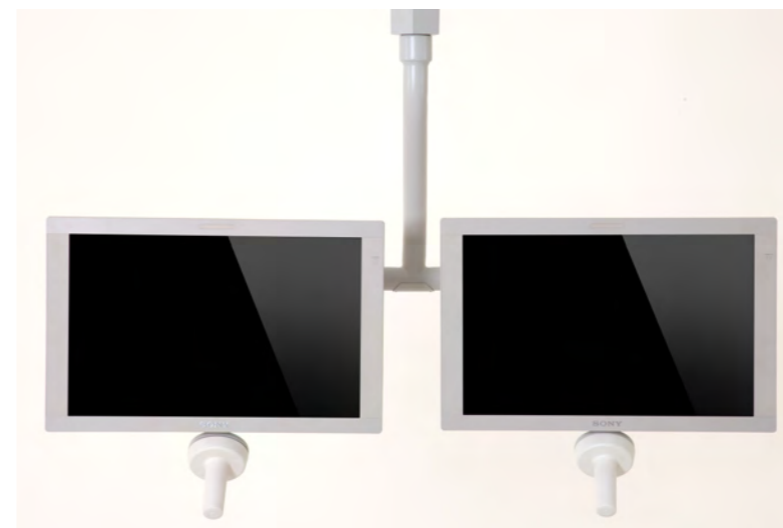
HD Supported Suspensions

Our system's suspensions for monitors and cameras helps delivers video information users need in/out of the surgical field in crisp and accurate high-definition forms without compromise. No signal conversion is necessary and there is no loss of video quality.

Optimal Connectivity

Flat monitor suspensions are prewired with various video and coaxial cables and allow the suspension to take different medical imaging monitors. The built-in fiber optic and 3G-SDI cables support the suspension of monitors taking Full HD 1920 x 1080 video signals for various HD video sources.

Heavy Duty HD Flat Monitor Suspensions

monitors up to a total 24 kg (52.9 lbs) which is ideal for the larger view displays up to 32". Large display compatibility allows the surgical team to see more of the procedural area. Optional Medical Grade Monitors also add uncompressed HD video at 1080p which shows true images from SD- and HD-endoscopes, ultrasound, C-arms and other equipment.

▲ Flat Monitor Suspension Arms support single/dual

Your Systems, Your Choices

Your systems can be combined at will with the choices below from one to a maximum 4 components.

▲ X70 without optional HD Camera Module

▲ X50 without optional HD Camera Module

▲ X70 with optional HD Camera Module

▲ X70 with optional HD Camera Module

X 70 : 72cm HD camera ready lighthead; 160,000lux intensity; including GUIDE lighting with 45,000lux intensity; HD Camera Module NOT included. Dimming from 10%~100%, 10 levels.

X 50 : 58cm HD camera ready lighthead; 130,000lux intensity; including GUIDE lighting with 12,000lux intensity; HD Camera Module NOT included. . Dimming from 10%~100%, 10 levels.

▲ XV with optional HD Camera Module

VX : A camera-ready suspension; with camera carrier; HD Camera Handle NOT included.

▲ S12/S15 with optional monitors

S12 : Single Flat Monitor Suspension for installation of optional flat monitor 15"~24" (<12Kg); monitor NOT included.

S15 : Single Flat Monitor Suspension for installation of optional flat monitor 24"~32" (>12Kg~ <15Kg); monitor NOT included.

▲ D24 with optional monitors

D24 : Dual Flat Monitor Suspension for two optional flat monitors 19"~24"/each (<24Kg totally); monitors NOT included.

▲ X50 /R mobile surgical light

X50 / R : VIDA X50 LED mobile surgical light with back-up battery for DC operation

ConVida Visualization Solutions

ConVida visualization solutions are developed with four modules for video routing, capture/streaming, communications, and central control capabilities. The classic solution, VIDA Vision, allows users to control our optional HD camera functions, and is built-in with multiple video routing capabilities for routing images from our optional HD camera module and other O.R. equipment to VIDA X system's suspensions.

* For more information about our visualization solutions, visit our website or your ConVida's sales representatives.

HD Camera Module Specifications:

▲ HD Camera Module on VIDA XV

Features	Technical Specs
Image Device	1/3 type Exmor CMOS sensor
Effective Pixels	Approx. 3.27 million
Digital Zoom	12x (240x with optical zoom)
Signal System	HD: 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/50, 720p/29.97, 720p/25
Image Size(H*V)	1920*1080,1280*720,720*480,720*576
Signal Output	Y/Pb/Pr

VIDA X Lighthead Specifications:

	X70	X50
Diameter of light head (cm)	72	58
Light source	LED	LED
Number of LEDs	90	60
Average LED Life (hours)	50,000	50,000
Color temperature, Kelvins	4200	4200
Illumination at 1m (lux)	160,000	130,000
Illumination adjustment	10%~100%	10%~100%
Color rendering index, CRI	95	95
Red color index, R9	95	95
Light field size, D10 (cm)	20~32	18~28
D50/D10 (%)	>50	>50
Total Irradiance (W/ m2) at maximum intensity	< 656	< 533
Depth of light L1+L2 (cm) 20%	157	142
Remaining illumination (cm, one mask)	68%	60%
Remaining illumination (cm, two mask)	48%	47%
Remaining illumination (cm, w/ tube)	87%	97%
Remaining illumination (cm, one mask w/ tube)	53%	55%
Remaining illumination (cm, two mask w/ tube)	40%	45%
Power consumption	100W @24Vdc	80W@24Vdc

Medical Grade HD Monitor Specifications:

Specifications	Sony LMD – 1950MD	Sony LMD – 2451MD
Screen Diagonal	Approx 24 1/4 inches (613.2mm)	Approx 19 inches (482mm)
Resolution (H x W)	1280 x 1024	1920 x 1200
Aspect Ratio	5:4	16:10
Brightness	600 cd/m2	400 cd/m2
Contrast Ratio	700:1	1,000:1
Viewing Angle	178°	178°
Signal Processing	10 bit	10 bit
Video Inputs	DVI-I, VGA (D15), RGBS (4BNC), S-Video, Composite video, Component video (4BNC), SD/HD/3G-SDI(BNC) Input/Output(Optional)	DVI-I, VGA (D15), RGBS (4BNC), S-Video, Composite video, Component video (4BNC), SD/HD/3G-SDI(BNC) Input/Output(Optional)
Power Supply	20-24 V DC	20-24 V DC
Power Consumption	66 Watt max	115 Watt max
Dimensions (W x H x D)	Approx. 455.8 x 368.3 x 101.7 mm (18 x 14 5/8 x 4 1/8")	Approx. 602 x 386 x 110 mm (23 ¾ x 5 ¼ x 4⅜")
Display Weight	Approx. 6.7 kg (14.75 lb)	Approx. 8.5 Kg (18.75lb)
Protection	Anti-reflective Protective Front Cover	Anti-reflective Protective Front Cover

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