

An Efficient View to Life for More Than Seeing

# **ETC LED OPERATING LIGHTS**





An innovative manufacturer of LED operating light systems, **ETKIN** provides high quality surgical illumination solutions for the medical professionals around the world. Surgical light products that range from full size operating theater lights to compact operating lights and examination lights are offered for the illumination needs of today's advanced OT Rooms.







#### TRUST YOUR OT ROOM LIGHTS!

Outstanding design of the lightheads and powerful LED modules deliver high performance illumination with use of comfort for the surgery professionals even for the long hour surgeries.

High CRI values of the light field area allow to see true colors that are very close to natural colors under the sun. State of the art components are embedded with successful engineering in the lightheads for providing powerful illumination for toughest surgeries. Today's OT Rooms demand reliability, durability and long life in their choice of equipment. ETKIN surgical light systems meet these demands with a performance above expectations.

# **Complete Solutions on Four Platforms**



Master Lightheads



Elite Lightheads



Anka Lightheads



Kayra Lightheads

# **Surgical Illumination Solutions**

### **OPERATING LIGHTS - Master and Elite Series**

Full size operating lights are offered in ceiling, wall mount, and mobile model options. Illumination levels of 130.000 lux and 160.000 are available.



# **COMPACT OPERATING LIGHTS - Anka Series**

A true operating light system with full features with a smaller lighthead, top quality illumination. Anka Series Operating Lights produce illumination levels of 100.000 lux, 110.000 lux and 120.000 lux.



# **EXAMINATION LIGHTS - Kayra Series**

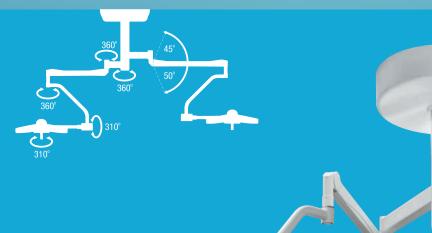
50.000 lux, 60.000 lux and 80.000 lux powerful illumination at 1 meter, these advanced examination lights can deliver outstanding performance for minor surgeries and detailed examinations.



# MASTER Series Lights



#### 130.000 Lux / 160.000 Lux



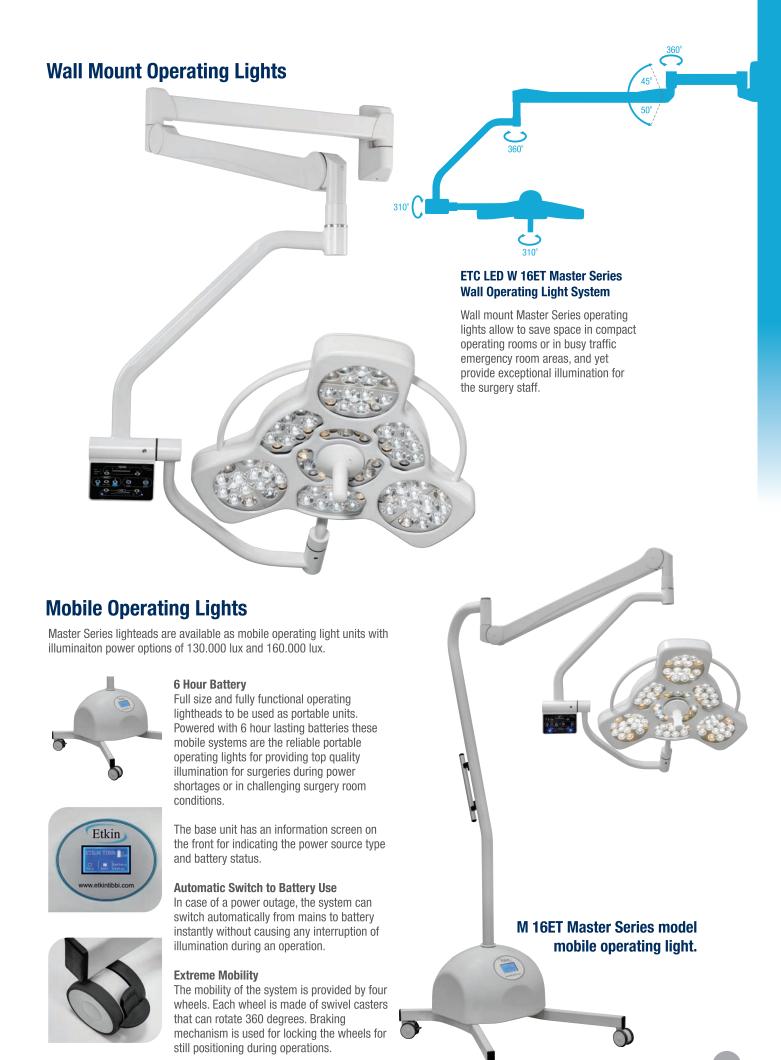
ETC LED C 16ET / 16ET Master Series model ceiling light. 160.000 lux illumination power on both heads.

### **Ceiling Operating Lights**

Master Series lightheads are available in 130.000 lux and 160.000 lux illumination levels. Carefully designed for providing maximum lighting power at all light field diameters, the Master Series models provide exceptional luminance regardless of focus adjustment.



- L1 + L2: 156 cm
- CRIa >96, CRI9 >97
- Focusing function: Electronic focusing control by LED on/off





#### 130.000 Lux / 160.000 Lux





#### **Mobile Operating Lights**

#### M 16ET Elite Series Mobile Operating Light

130.000 lux and 160.000 lux Elite Series model mobile operating lights are energy efficient and they can deliver high performance illumination with little power consumption. These energy efficient portable operating lights can stand up to long operations running on battery up to **10 hours**.

The base unit has an information screen on the front for indicating power source type and battery status.

#### **Automatic Switch to Battery Use**

In case of a power outage, the system can switch automatically from mains to battery instantly without causing any interruption of illumination during an operation.

#### **Extreme Mobility**

The mobility of the system is provided by four wheels. Each wheel is made of swivel casters that can rotate 360 degrees. Braking mechanism is used for locking the wheels for still positioning during operations.

#### **Wall Mount Operating Lights**

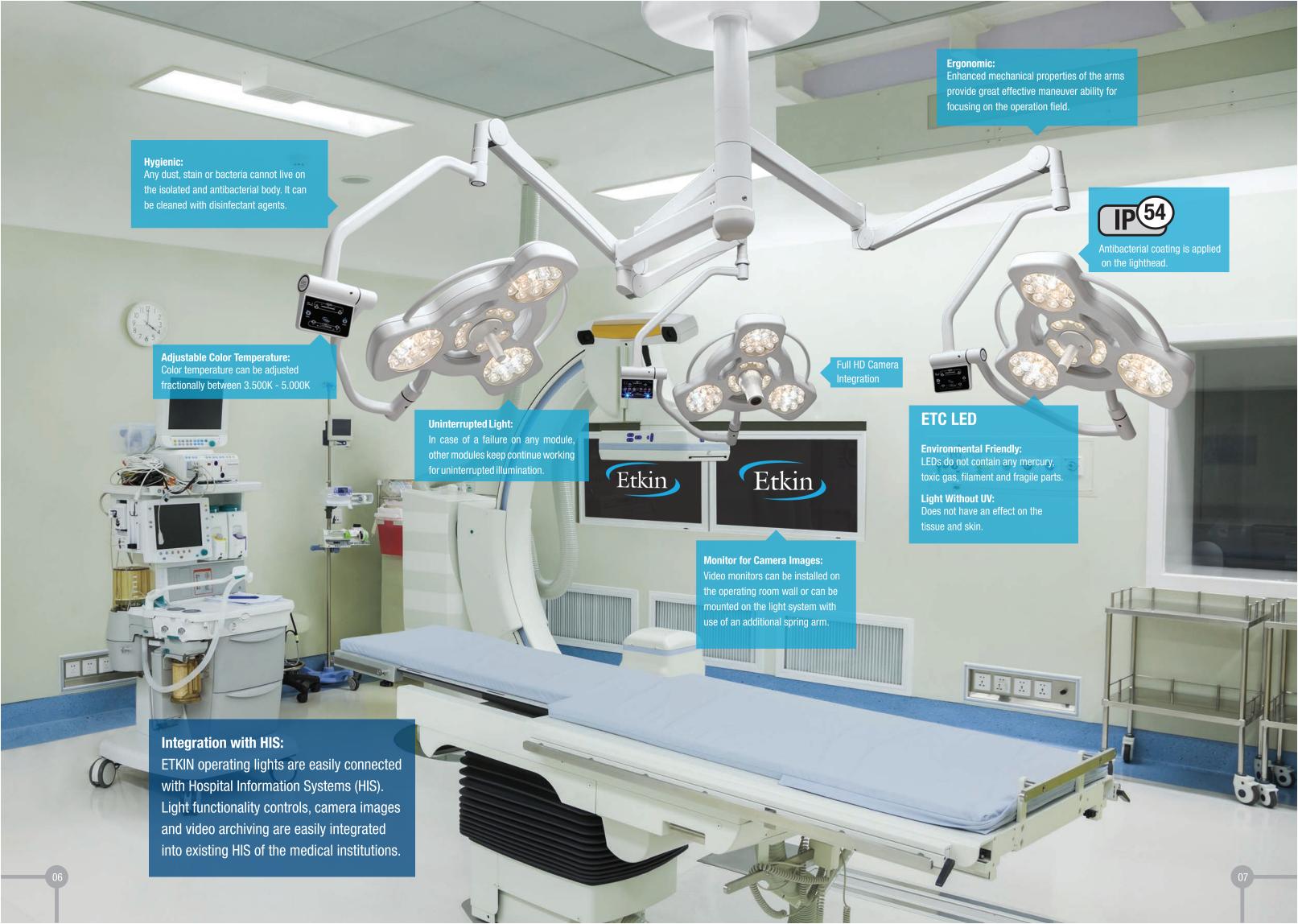
#### **ETC LED W 16ET Elite Series Wall Operating Light System**

Wall mount Elite Series operating lights allow to save space in compact operating rooms or in busy traffic emergency room areas, and yet provide exceptional illumination for the surgery staff.



ETC LED W 16ET, folded by the wall, saving space and providing space ergonomy.







# **Advanced Technology & High Quality Components**

In all of the products highest quality components are integrated with successful engineering design for superior illumination and long lasting high performance.

#### **Laminar Flow**



Lighthead design enables ideal laminar air flow for managing air turbulance for minimizing contamination of bacteria.

#### **Endoscopy Mode**



Endoscopy mode for comfortable ambiance lighting during endoscopy operations.

#### **Shadowless Light**



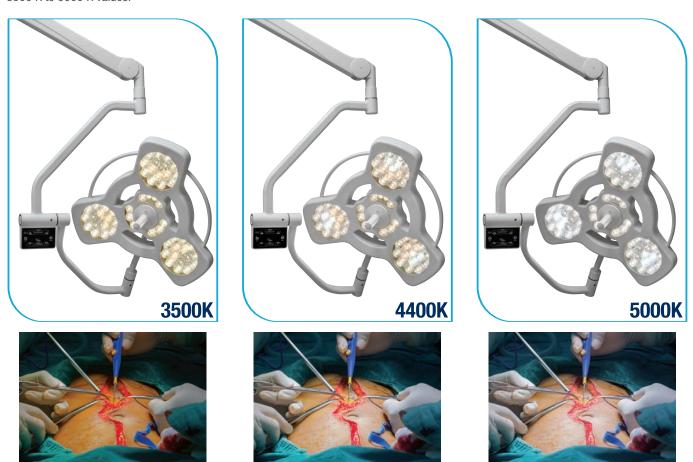
Shadowless light provides uninterrupted illumination in case of blocking of the LED modules by the head or shoulders of the surgical staff.

### **Control Panel of a Camera Integrated Light System**



#### **Color Temperature Adjustment**

Color temperature adjustment feature provides the ideal light for the planned surgery. User can choose color temperature settings from 3500K warm values to 5000K cold white values. Color temperature adjustment is set in 5 steps between 3500 K to 5000 K values.





# **Super Ease of Use and Control**

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360° joint

#### **Modular Systems**

Ceiling light systems can be configured as single head, dual head, triple head, and quadruple head, or triple head with monitor arm systems.



#### **Great Maneuver Ability**

360 degree rotation capability at all joints provide great comfort of easy maneuverability.







#### **Dual Face Light Control Panel**



User control panel on light arm can be configured with dual face control panel option.

This option has two control panels facing opposite directions, which enables very easy access to the control panel. Surgery staff working around the operating table can reach for control panel from both sides of the table and continue surgery in comfort without changing their position.

#### **Synchronization of Multiple Lightheads**

Ceiling lights that have multiple lightheads can be synchronized for any specific function as requested by the user.

# **Remote Control / Wall Control Panel**



For operating rooms that require control panel of the light system as a separate unit, the wall control panel provides an ideal solution.

All functions of the light system can be controlled on the wall control panel including the full functions of the camera system.

#### **Android Connection**

Compatible with android systems for WiFi control of the light system.



#### **Full HD Camera**

A full HD Camera can be integrated into any type operating light, regardless of ceiling, mobile or wall mount model. Full HD camera features the main specifications of 1920 x 1080 resolution, 12x digital zoom, 10x optical zoom.

#### **Camera Ready Lightheads**

For users who want to have the camera option later in future, the camera substructure with ready cabling allows flexibility of adding a camera to the light system at a later time.



Camera casing without the sterilizable handle





Camera ready lighthead with camera substructure and with the sterilizable handle.

#### **Camera Integration**

Full HD Camera integration on the lighthead enables surgeons to view the fine details of the surgery area in zoomed in larger views on the operating room monitor screen, which reduces the risks during diffcult operations.

Video images from the camera can be seen on the monitor screens inside the operating room. With full integration to the hospital network and information systems the camera images can be viewed from other locations in the hospital, such as doctor offices , meeting rooms and the education centers.



Full HD Camera inside the customized protective casing



Sterilizable cover is used to cover the camera during surgeries.



#### **Spinner Acrobat**

With use of a specially designed articulation, Spinner Acrobat system, the camera integrated lighthead can be rotated easily to > 360° and to even more sweeping angles.



### **Specifications of Operating Lights**

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FEATURE	ELITE SERIES	MASTER SERIES
Illumination	130.000 lux / 160.000 lux	130.000 lux / 160.000 lux
Spot Diameter	11 cm - 18 cm	16 cm - 30 cm
L1 +L2	110 cm	156 cm
Focusing Type	Motorized electrical focusing	Electronic LED on/off focusing
Power Consumption	50 W	70 W
Color Temperature	3500K - 5000K	3500K - 5000K
Endoscopy Mode	Yes	Yes
CRIa	> 96	> 96
CRI9	> 97	> 97
LED Life	60.000 hr	60.000 hr
Maximum Illumination	At 11 cm	For All Spot Diameters
Wireless Control Wall Panel	Optional	Optional
Double Face Control Panel	Optional	Optional

<sup>\*</sup> Etkin Medical Devices may make changes to specifications and product descriptions at any time without notice. Technical values provided here are measured at laboratory conditions and may show slight variations under different measurement practices.



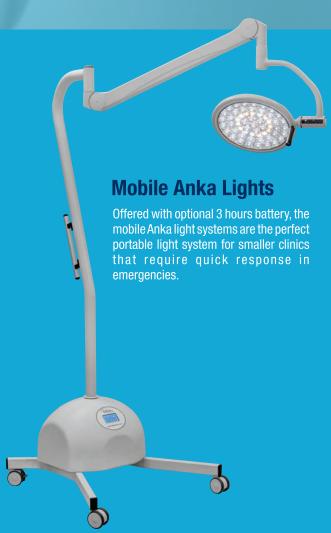
#### 100.000 Lux / 110.000 Lux / 120.000 Lux

#### **Compact Operating Lights**

ANKA Series Lightheads are compact operating lights that provide illuminations between 100.000 lux, 110.000 lux and 120.000 lux. It makes them ideal for minor surgeries and critical surgeries in smaller clinics.

ANKA Series lights are true operating lights in their reduced dimensions. They have outstanding illumination quality with all functions of a full sized operating light.





# **Specifications**

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FEATURE	ANKA SERIES	
Illumination	100.000 lux / 110.000 lux / 120.000 lux	
Spot Diameter	23 cm - 31 cm	
L1 +L2	> 203 cm	
Focusing Type	Electronic LED on/off focusing	
Color Temperature	3600K - 5000K	
Endoscopy Mode	Yes	
CRIa	> 96	
CRI9	> 97	
LED Life	60.000 hr	
Lighthead diameter	37 cm	
Battery	Optional	

<sup>\*</sup> Technical values provided here are measured at laboratory conditions and may show slight variations under different measurement practices.



Exceptional illumination with all functions of a full size operating light.

### **Wall Mount Anka Lights**

Wall mount Anka Series compact operating lights allow to save space in compact operating rooms or in busy traffic emergency room areas, and yet provide exceptional illumination for the surgery staff.



#### **Anka Control Panel**



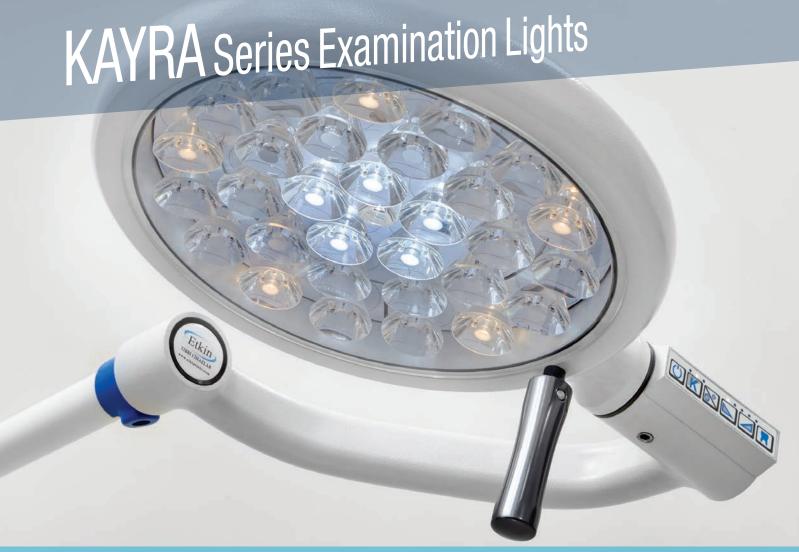
On / Off

**K** 3500 - 5000 K

23 - 31 cm

> 30 % - 100 % illumination

Endoscopy



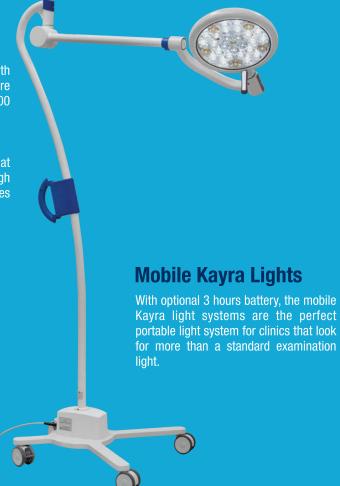
#### 50.000 Lux / 60.000 Lux / 80.000 Lux

# **Examination Lights**

Kayra Series Lightheads are the examination lights offered with advanced features such as focus adjustment, color temperature adjustment and dental mode. 50.000 lux, 60.000 lux and 80.000 lux illumination levels are available for users' choice.

#### 80.000 lux at 1 meter!

Kayra Series lights are high end examination light systems that deliver up to 80.000 lux illumination at 1 meter distance. High CRI values of 95 and color temperature adjustment features make them possible to use for minor surgeries when needed.



# **Specifications**

FEATURE	KAYRA SERIES	
Illumination	50.000 lux / 60.000 lux / 80.000 lux	
Spot Diameter	15 cm - 24 cm	
L1 +L2	> 185 cm	
Focusing Type	Electronic LED on/off focusing	
Color Temperature	3600K - 5000K	
Dental Mode	15 cm straight beam	
CRIa	> 96	
CRI9	> 97	
LED Life	60.000 hr	
Lighthead diameter	29 cm	
Battery	Optional	

<sup>\*</sup> Technical values provided here are measured at laboratory conditions and may show slight variations under different measurement practices.













# **Ceiling Kayra Lights**

Kayra Series lightheads can be mounted as a ceiling examination light and provide illumination up to 80.000 lux with full functions.



# **Wall Mount Kayra Lights**

Wall mount Kayra Series examination lights help small and crowded clinics to save space and maintain powerful illumination for treatments and examinations.









# ADVANCED SURGICAL ILLUMINATION SOLUTIONS









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