



# NEW ES-LED SERIE

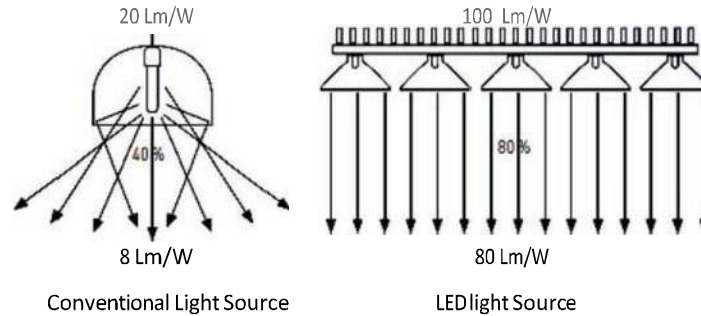


**Pulse Healthcare Technology**  
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## Unique Features of ES-LED OT Lights

### Efficient Focus of LEDs



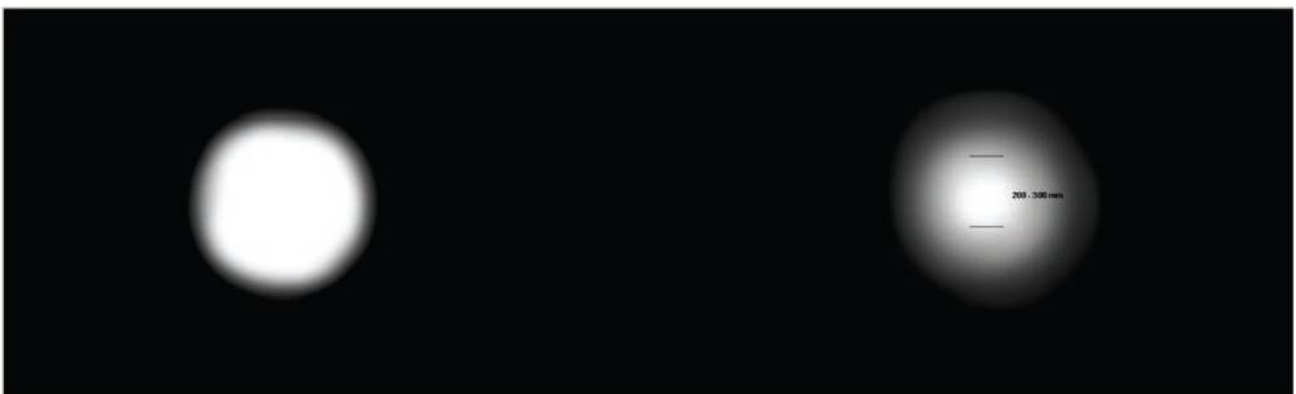
### Auto Focus

Due to high Focus Co-efficient of LEDs, the beam formation takes place at exactly 1 meter distance. Hence manual adjustment is eliminated; focus can be attained from any convenient angle by simple adjustment of distance of dome from site.



### Beam Formation

ES-LED light produces high light intensity across the full illuminate area avoiding the variable contrast lighting and distractions, and offers uniform VISION for working area. Each Reflector generates homogeneous lighting for surface. This creates an Ideal depth of illumination, enabling the operator to work without the need to make the readjustments. Traditional Operating Theater lights create a high light intensity by squashing the light flux into the middle of the beam, creating a "hot-spot". This high contrast 'hot-spot' gives a very bright central, leaving the rest of the field relatively dim in-comparison



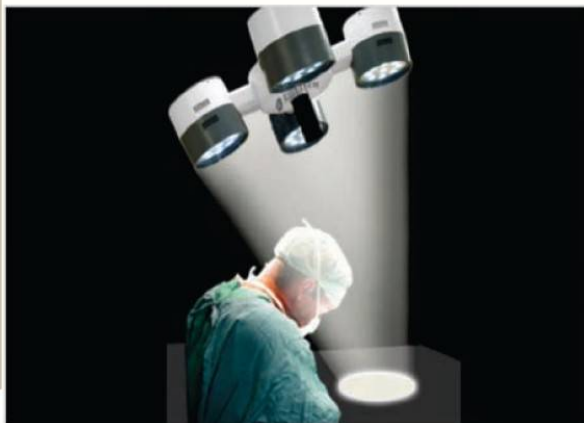


## Unique Features of ES-LED OT Lights



### Laminar air flow compatibility and Compact design

The open design of the ES-LED lights reduces the Surface area that impedes the flow of air from the air supply ceilings, resulting in a less turbulent flow underneath the light and thus controlling the contamination in the operating room. The shape of ES-LED's DOME assures the visual comfort and is particularly suitable for Laminar Flows. Lastly its compact design makes the ES-LED light specifically small, flat and streamlined which in turn gives it's distinctive and justifiably futuristic appearance.



### Shadow Free illumination

Shadows exist in surgery, created by surgeon position, surgical team movement, equipment or the depth of a wound. The key is to minimize shadows so a surgeon always has the clearest possible view of the surgical site. ES-LED light ensures the relation between light body and light field diameter to perform an optimum illumination of the OT field in terms of area and depth. The ES-LED reflectors are designed to construct a number of light beams to dissolve the shadows.



### Suturing Light for convenient post-operative procedure

When the lights are turned off a low intensity radiant beam is emitted so that suturing process can be carried out in great comfort and without timdelay.



### Multi Lens System

Good Visibility and the homogeneous illumination at the surgical site are the key elements during the operation. Therefore ES-LED has design its Multi-lens system based on the individual optical lens principia. Since each LED's has its own convergent lens, each creates its own light field. It distributes the emitted light volume uniformly in the operating room.



# ES-LED ECO/M Mobile Configuration



Technical data	ES-LED ECO/M
Reflector System	4
Illumination Intensity	100000 Lux
LED Service Life	40000 Hours
Colour Temperature	5200 K
Colour Rendering Index	90 Ra
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	220 - 280 mm
Brightness Adjustment	Nearly 0% - 100% From Panel.
Power	230 VAC / 50 / 60 Hz

## Classification

Model Name	<b>ES-LED ECO/M</b>
Power	230 VAC / 50 / 60 Hz
Available upon special request	110V/50~60Hz
Note : power supply is defaulted as standard configuration. please make comment on special request for 110V and mention clearly in Purchase Order. Shipment date for special request might be later then standard please contact our salesperson to confirm.	
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Standard Followed	ISO 9001-2008, EN ISO 13485:2003 / AC 2007 BS EN 980-2008, BS EN 45014-98, BS EN ISO 14971:2009, BS EN 45014 -98, EN 62366:2008, IEC 60601-1-2-2007, IEC 60601-1-4

## Packing / Packaging List

- ▶ Dome
- ▶ Sterilized Handle
- ▶ Control Panel
- ▶ Mobile Arms



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# ES-LED ECO/C Ceiling Configuration



Technical data	ES-LED ECO/C
Reflector System	4
Illumination Intensity	100000 Lux
LED Service Life	40000 Hours
Colour Temperature	5200 K
Colour Rendering Index	90 Ra
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	220 - 280 mm
Brightness Adjustment	Nearly 0% - 100% From Panel.
Power	230 VAC / 50 / 60 Hz

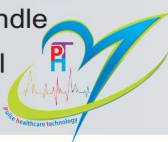
## Classification

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Technical data	ES-LED ECO/CC Twin
Reflector System	4 + 4
Illumination Intensity	100000 Lux + 100000 Lux
LED Service Life	40000 Hours
Colour Temperature	5200 K
Colour Rendering Index	90 Ra
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	220 - 280 mm
Brightness Adjustment	Nearly 0% - 100% From Panel.
Power	230 VAC / 50 / 60 Hz

## Classification

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Suitability For Laminar Air Flow



Special Easy Focusing arrangement



Technical data	ES-LED NOVA/M
Reflector System	4
Illumination Intensity	140000 Lux
LED Service Life	50000 Hours.
Colour Temperature	5500 K.
Colour Rendering Index	90 Ra
Temperature increase in Surgeon's head area	< 2 ° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 0%- 100% From Panel or Remote Control.
Power	230 VAC/ 50/60 Hz.

## Classification

Model Name	<b>ES-LED NOVA/S</b>
Power	230 VAC / 50 / 60 Hz
Available upon special request	110V/50~60Hz
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Suitability For Laminar Air Flow



Special Easy Focusing arrangement



Technical data	ES-LED NOVA/C
Reflector System	4
Illumination Intensity	140000 Lux
LED Service Life	50000 Hours
Colour Temperature	5500 K.
Colour Rendering Index	90 Ra.
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 0% - 100% From Panel or Remote Control
Power	230 VAC / 50 / 60 Hz

## Classification

Model Name	<b>ES-LED NOVA/C</b>
Power	230 VAC / 50 / 60 Hz
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Suitability For Laminar Air Flow



Special Easy Focusing arrangement

## ES-LED NOVA/Cc

Reflector System	4 + 3
Illumination Intensity	140000 Lux + 90000 Lux
LED Service Life	50000 Hours
Colour Temperature	5500 K.
Colour Rendering Index	90 Ra
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 0% - 100% From Panel or Remote Control
Power	230 VAC / 50 / 60 Hz

## Classification

Model Name	<b>ES-LED NOVA/Cc</b>
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Suitability For Laminar Air Flow



Special Easy Focusing arrangement

Technical data	ES-LED NOVA/CC
Reflector System	4 + 4
Illumination Intensity	140000 Lux + 140000 Lux
LED Service Life	50000 Hours
Colour Temperature	5500 K.
Colour Rendering Index	90 Ra
Temperature Increase in Surgoen's head area	< 2° C
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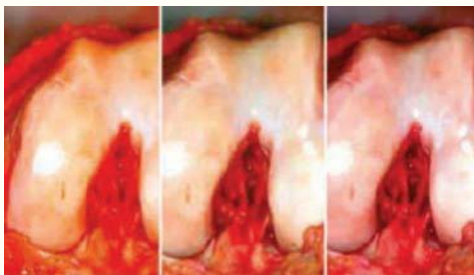
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## Colour Serles

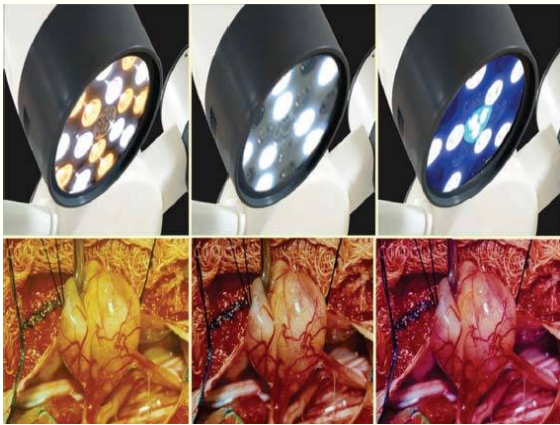


### Variable Colour Temperature



The colour temperature can be varied in multiple steps from 3800 K to 6800 K in steps of 200 K. A very wide range of possible 20 options is provided. Light with a higher colour temperature improves the ability to concentrate, which allows the surgeons to have optimum visual conditions depending on the extent of perfusion of the surgical site. A better contrast can also be achieved by changing the light colour temperature in accordance with the tissue type and the structure of the OT light field.





Technical data	COLOR/M
Reflector System	4
Illumination Intensity	140000 Lux
LED Service Life	50000 Hours.
Colour Temperature	3800 K - 6800 K Variable
Colour Rendering Index	Variable
Temperature increase in Surgeon's head area	< 2 ° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 20% - 100% From Panel or Remote Control

## Classification

Model Name	<b>ES-LED COLOR/M</b>
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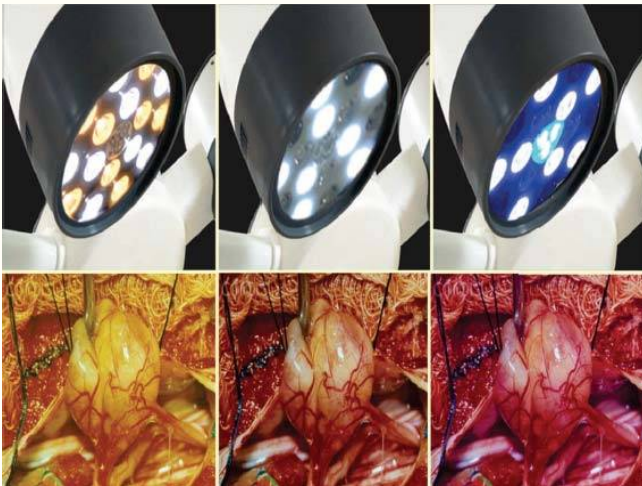
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ES-LED COLOR/C	
Reflector System	4
Illumination Intensity	140000 Lux
LED Service Life	50000 Hours
Colour Temperature	3800 K - 6800 K variable.
Colour Rendering Index	Variable
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 20% - 100% From Panel or Remote Control

## Classification

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- ▶ Dome
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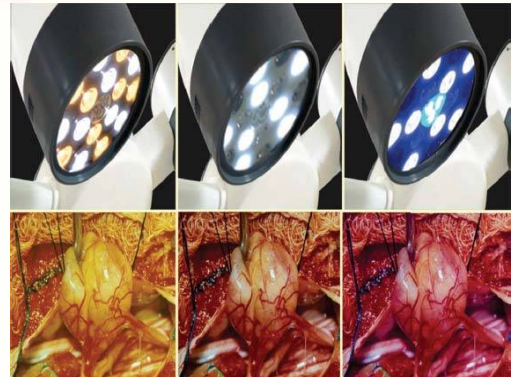


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# ES-LED COLOR/CC Ceiling Configuration



ES-LED COLOR/CC	
Reflector System	4 + 4
Illumination Intensity	140000 Lux + 140000 Lux
LED Service Life	50000 Hours
Colour Temperature	3800 K - 6800 K variable.
Colour Rendering Index	Variable
Temperature Increase in Surgoen's head area	< 2° C
Index Light Spot	200 - 250 mm
Brightness Adjustment	Nearly 20% - 100% From Panel or Remote Control

## Classification

Model Name	<b>ES-LED COLOR/CC</b>
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HOSPITAL & CLINIC DESIGN  
& DEVELOPING

MEDICAL & LABORATORY  
SUPPLIES



ES-512B  
Dental Unit with Chair



ESB-02-01  
ESB-02-02  
ESB-02-03



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