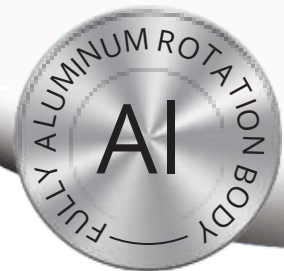




Light With   
German Technology Arm  
Advance Technology  
Strong  
Innovative

# SURGICAL LED LIGHTS



**BIONEX** <sup>★</sup>  
SERIES



**RIO** <sup>★</sup>  
SERIES



**NOVA** <sup>★</sup>  
SERIES



**HEX** <sup>★</sup>  
SERIES



US-FDA APPROVED



ISO CERTIFIED



CE CERTIFIED

[www.bionex.pt](http://www.bionex.pt)



## Endo Mode

Endo mode reduces the overall intensity of the surgical LED light to create a lower ambient illumination level in the operating room. This helps improve the contrast and visibility of the endoscopic images captured during the procedure.

## Touchscreen streamlined shape control panel on the light head

- Illumination intensity adjustment
- Color temperature adjustment
- Endo mode
- Memory Function
- Power On-Off



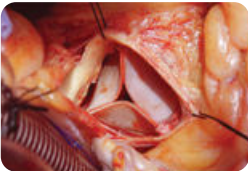
## Meets modern laminar flow OR requirements

The open design of the light reduces the surface area that impedes the flow of air from the air supply ceilings, resulting in a less turbulent flow underneath the light.

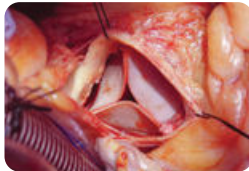
## Adjustable Colour Temperature

BIONEX LED lights are capable of producing a wide range of color temperatures between 4000-5000 K, allowing users to adjust the lighting to suit different purposes, environments, and preferences. Adjustable color temperature allows surgeons to fine-tune the lighting to match their specific needs for different procedures.

4000 K



4500 K

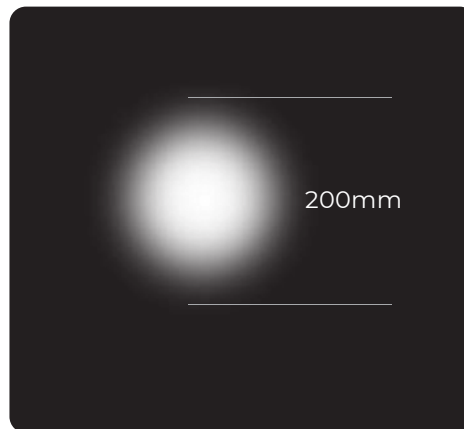


5000 K



## Supramaximal effective light field

With high light intensity and large spot size, 1200mm depth of field provides good lighting without having to refocus when the surgical wound location changes. The light head can be positioned far away from the wound to ensure better laminar flow.



## Focusing System

The brightness of different LEDs is adjustable to change the spot size, which will avoid the possible occurrence of mechanical malfunctions.

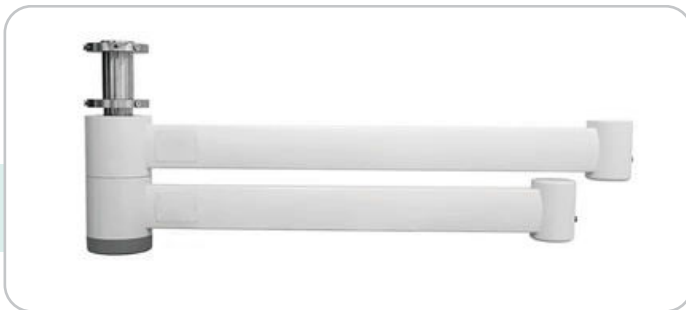
## Rotation Body in Aluminium



Main material: High strength integrated aluminium forming.



High quality bearing to ensure no drift and flexible rotation



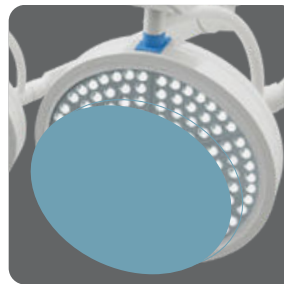
Seamless welding ensures each arm supports a load of up to 80 kg.

## Sterilizable handle



To help control infection in the operating room, the Handle can withstand sterilization processes such as autoclaving or chemical sterilization without compromising its integrity or functionality, making it easier to clean and maintain sterility

## Safety Glass for Lens Protection



We offer LED lights with protective fire resistant ESG safety glass cover for scratch proof, fast disinfection process and improve the light penetration. It is made of monolayer safety glass which protects the lens from ultra-violet and infrared rays.



## Digital video recorder - Full HD wireless Camera

- Support Digital Signal LVDS and Network Signal Video Output
- Low Illumination, 0.001Lux/F1.5(Color), 0.0005Lux/F1.5(B/W), 0 Lux with IR
- Support 3D Digital Noise Reduction, High Light Suppression
- Electronic Image Stabilization
- Integrated central camera or independent third-arm camera-optional

**MaxResolution** : 2MP (1920×1080)

**MaxOutput** : Full HD 1920×1080@30fps Live Image

**Lens**

: F 1.8 Lens, 28mm wide angle, 5.5-180mm, 33x optical zoom, F1.5-F4.0

**OpticalZoom** : 50x

**DigitalZoom** : 150x

**VideoOutput** : HDMI

**Position** : Carrier Arm Camera/Integrated Camera

# BIONEX+SERIES

Equipped with advanced

Light with  **GermanTechnology Arm**

## features

### Special Features

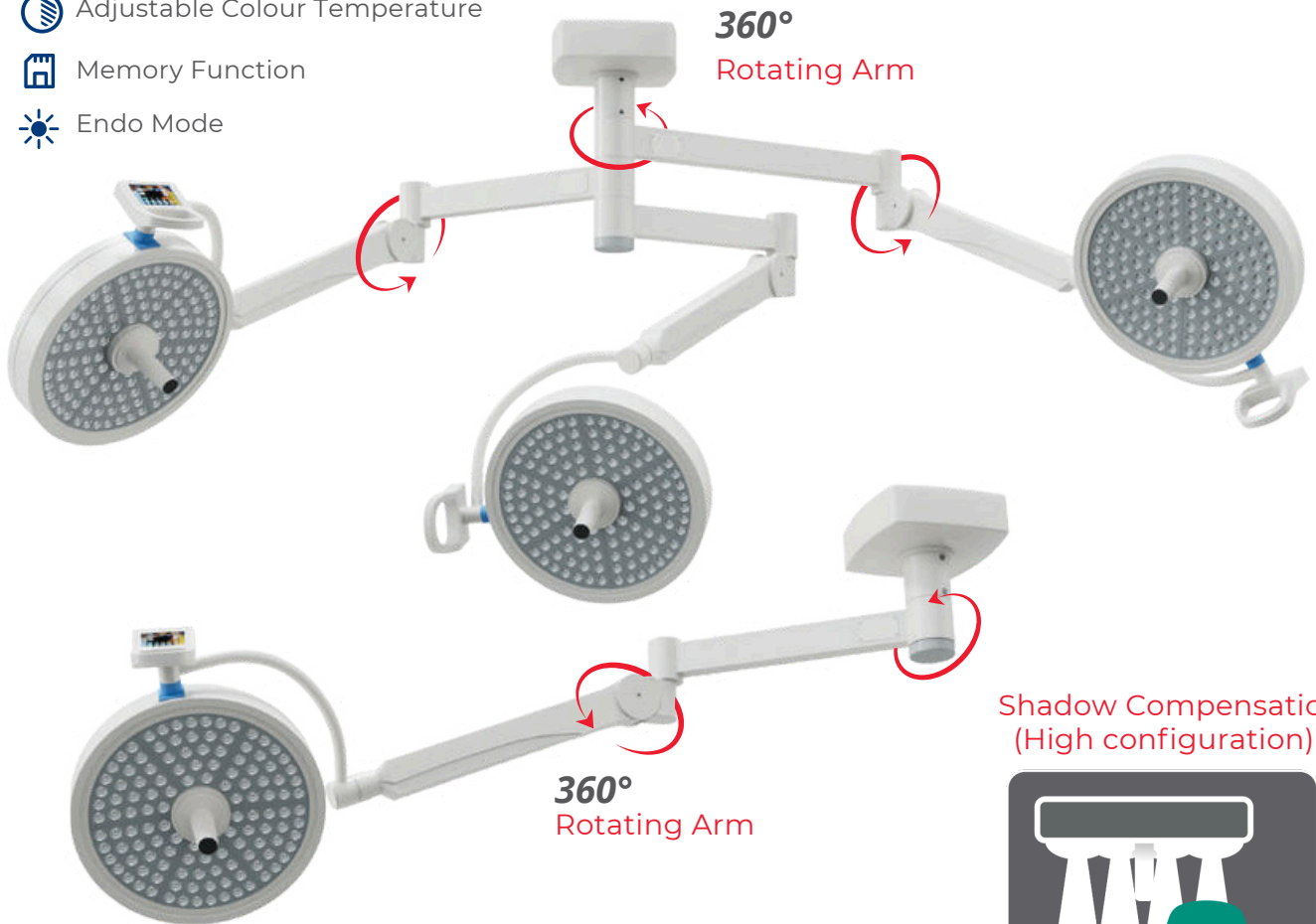
Shadow less Light, Memory Function, High quality sterilizable handle, With protective fire resistant ESG safety glass for scratch proof, fast disinfection process, protects UV and IR rays and improve light penetration. Body is made of high quality fire resistant polymer.

Single non winged round shape lamp head for easy maintenance and better sealing against dust and fumigation.

 Adjustable Colour Temperature

 Memory Function

 Endo Mode



Shadow Compensation (High configuration)



Automatically boosts LED brightness in unblocked areas when the doctor's head blocks part of the light, ensuring consistent surgical field illumination.

### Standard Specifications

Size of Light Field	12-30 cm
Colour Temperature	4000-5000 K
Colour Rendering Index	93 RA
LED Life	>50000 Hrs.
Diameter of Light	500mm
Brightness Control	Capacitive Touch Panel
Power Supply	220V/50Hz AC
Colour of LED	White & Yellow (Double Colour)
Focusing	Adjustable
Monitor / Camera	Optional



Standard Control Panel

# BIONEX SERIES

Light with   
**GermanTechnology Arm**

Equipped with advanced features

All models are available in ceiling-mounted, Mobile (with or without battery backup), and Wall-Mounted options.



BX 126 + 126 + 126

Intensity	1,70,000+1,70,000+1,70,000 ±10%
Number of LED	126 + 126 + 126



Mobile Model

Mobile Model with battery backup



BX 126 + 126

Intensity	1,70,000 + 1,70,000 ±10%
Number of LED	126 + 126



BX 108 + 108

Intensity	1,50,000 + 1,50,000 ±10%
Number of LED	108 + 108



BX 84 + 84

Intensity	1,40,000 + 1,40,000 ±10%
Number of LED	84 + 84



BX 54 + 54

Intensity	1,50,000 + 1,50,000 ±10%
Number of LED	54 + 54

# RIO SERIES

Light with  **GermanTechnology Arm**

Equipped with advanced features

## Special Features

Shadow less Light, Memory Function, High quality sterilizable handle, With special European design for ventilation of heat

 Adjustable Colour Temperature

 Memory Function

 Endo Mode

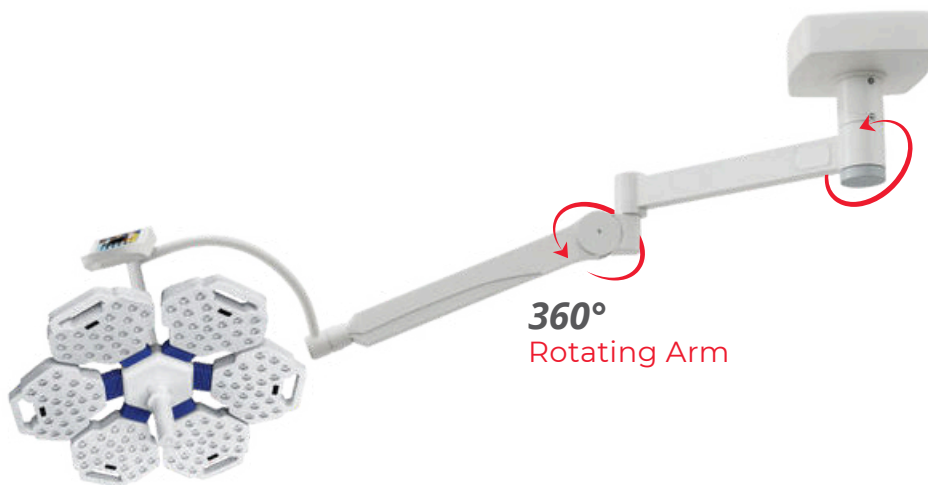
**360°  
Rotating Arm**



**Shadow Compensation  
(High configuration)**



Automatically boosts LED brightness in unblocked areas when the doctor's head blocks part of the light, ensuring consistent surgical field illumination.



**360°  
Rotating Arm**

## Standard Specifications

Size of Light Field	12-30 cm
Colour Temperature	4000-5000 K
Colour Rendering Index	93 RA
LED Life	>50000 Hrs.
Diameter of Light	650mm
Dimming Range	10%-100%
Brightness Control	Capacitive Touch Panel
Power Supply	220V/50Hz AC
Colour of LED	White & Yellow (Double Colour)
Focusing	Adjustable
Monitor / Camera / Wireless Wall Controller	Optional



Standard Control Panel



Optional Control Panel

# RIO SERIES

Light with   
**GermanTechnology Arm**

Equipped with advanced features

All models are available in ceiling-mounted, Mobile (with or without battery backup), and Wall-Mounted options.



RIO 6+6+6

Intensity	1,60,000+1,60,000+1,60,000 ±10%
Number of LED	126 + 126 + 126



Mobile Model

Mobile Model with battery backup



RIO 6+6

Intensity	1,60,000 + 1,60,000 ±10%
Number of LED	126 + 126



RIO 6+5

Intensity	1,60,000 + 1,40,000 ±10%
Number of LED	126 + 105



RIO 6+4

Intensity	1,60,000 + 1,30,000 ±10%
Number of LED	126 + 84



RIO 6+3

Intensity	1,60,000 + 1,00,000 ±10%
Number of LED	126 + 63

# RIO SERIES

Equipped with advanced features

Light with  **GermanTechnology Arm**



RIO 5+5

Intensity	1,40,000 + 1,40,000 ±10%
Number of LED	105 + 105



RIO 5+4

Intensity	1,40,000 + 1,30,000 ±10%
Number of LED	105 + 84



RIO 5+3

Intensity	1,40,000 + 1,00,000 ±10%
Number of LED	105 + 63



RIO

Intensity	1,30,000 + 1,30,000 ±10%
Number of LED	84 + 84



RIO 4+3

Intensity	1,30,000 + 1,00,000 ±10%
Number of LED	84 + 63



RIO 3+3




Intensity	100,000 + 1,00,000 ±10%
Number of LED	63 + 63

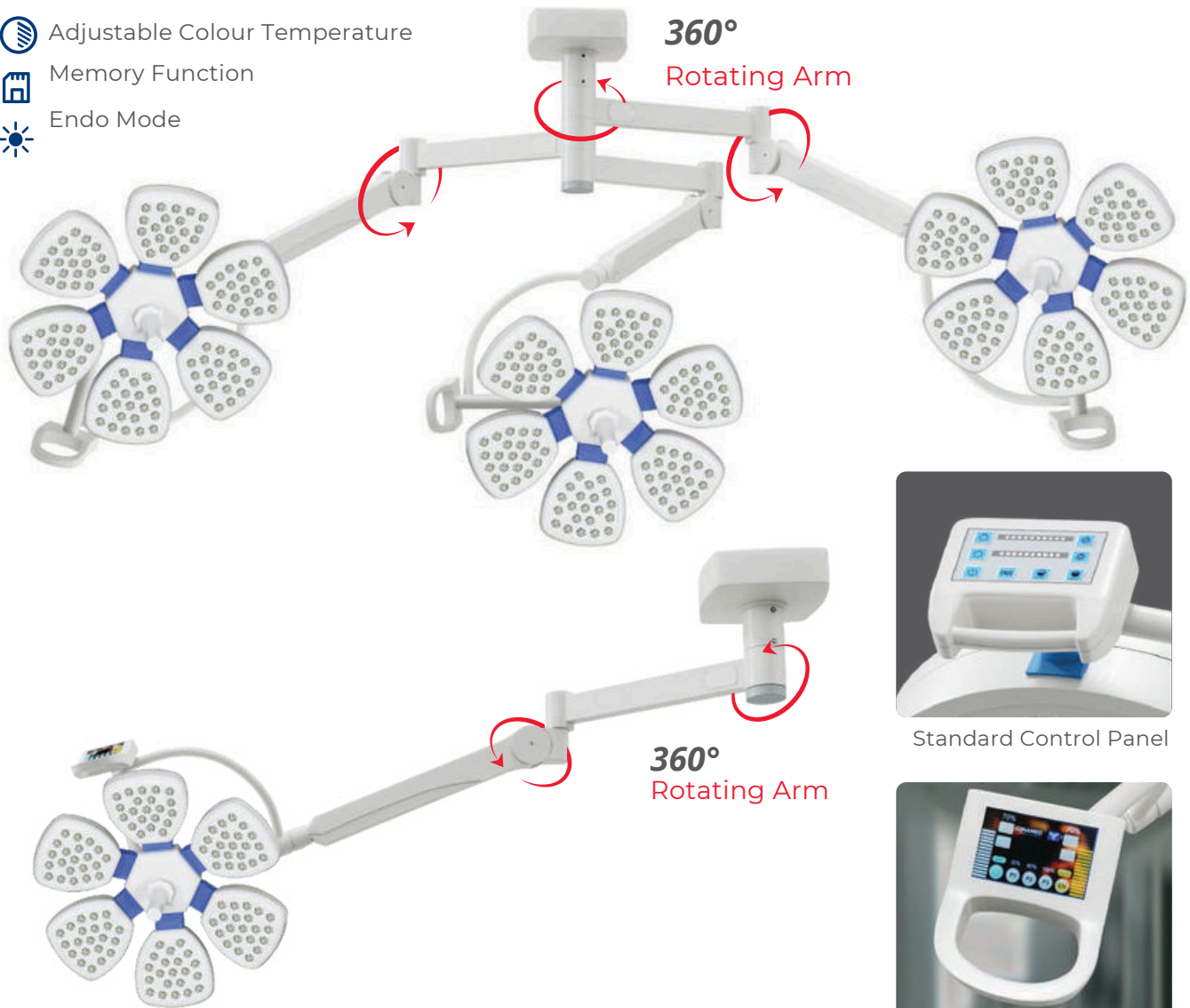
# NOVA SERIES

Light with   
GermanTechnology Arm

Equipped with advanced features

Shadow less Light, Memory Function, High quality sterilizable handle, With special European design for ventilation of heat

-  Adjustable Colour Temperature
-  Memory Function
-  Endo Mode



## Standard Specifications

Size of Light Field	12-30 cm
Colour Temperature	4000-5000 K
Colour Rendering Index	93 RA
LED Life	>50000 Hrs.
Diameter of Light	600mm
Dimming Range	10%-100%
Brightness Control	Capacitive Touch Panel
Power Supply	220V/50Hz AC
Colour of LED	White & Yellow (Double Colour)
Focusing	Adjustable
Wireless Wall Controller	Optional

# NOVA SERIES

Light with   
**GermanTechnology Arm**

Equipped with advanced features

All models are available in ceiling-mounted, Mobile (with or without battery backup), and Wall-Mounted options.



NOVA 6+6+6

Intensity	1,60,000+1,60,000+1,60,000 ±10%
Number of LED	126 + 126 + 126



Mobile Model

Mobile Model with battery backup



NOVA 6+6

Intensity	1,60,000 + 1,60,000 ±10%
Number of LED	126 + 126



NOVA 6+5

Intensity	1,60,000 + 1,40,000 ±10%
Number of LED	126 + 105



NOVA 6+4

Intensity	1,60,000 + 1,30,000 ±10%
Number of LED	126 + 84



NOVA 6+3

Intensity	1,60,000 + 1,00,000 ±10%
Number of LED	126 + 63

# NOVA SERIES

Equipped with advanced features

Light with   
GermanTechnology Arm



NOVA 5+5

Intensity	1,40,000 + 1,40,000 ±10%
Number of LED	105 + 105



NOVA 5+4

Intensity	1,40,000 + 1,30,000 ±10%
Number of LED	105 + 84



NOVA 5+3

Intensity	1,40,000 + 1,00,000 ±10%
Number of LED	105 + 63



NOVA 4+4

Intensity	1,30,000 + 1,30,000 ±10%
Number of LED	84 + 84



NOVA 4+3

Intensity	1,30,000 + 1,00,000 ±10%
Number of LED	84 + 63



NOVA 3+3




Intensity	100,000 + 1,00,000 ±10%
Number of LED	63 + 63

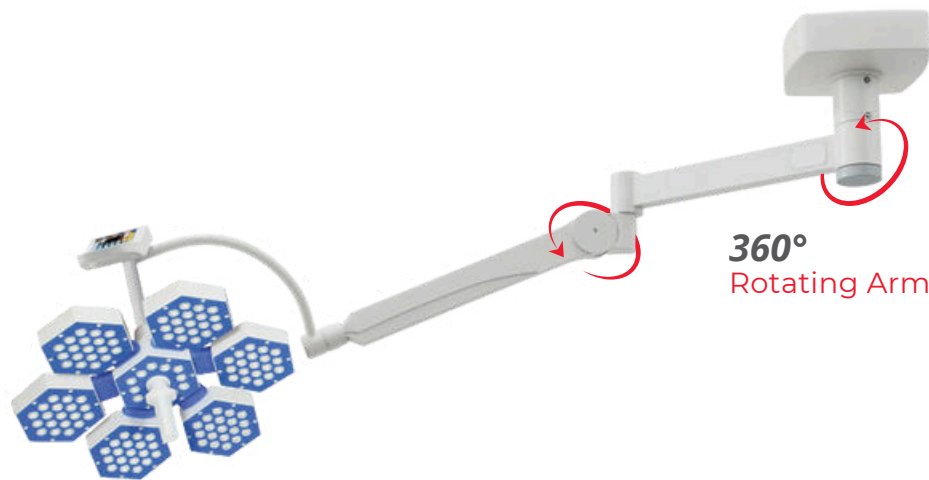
# HEX SERIES

Light with   
**GermanTechnology Arm**

Equipped with advanced features

Shadow less Light, Memory Function, High quality sterilizable handle, With special European design for ventilation of heat

-  Adjustable Colour Temperature
-  Memory Function
-  Endo Mode



Standard Control Panel



Optional Control Panel

## Standard Specifications

Size of Light Field	12-30 cm
Colour Temperature	4000-5000 K
Colour Rendering Index	93 RA
LED Life	>50000 Hrs.
Diameter of Light	500mm
Dimming Range	10%-100%
Brightness Control	Capacitive Touch Panel
Power Supply	220V/50Hz AC
Colour of LED	White & Yellow (Double Colour)
Focusing	Adjustable
Wireless Wall Controller	Optional

# HEX SERIES

Equipped with advanced features

Light with   
GermanTechnology Arm

All models are available in ceiling-mounted, Mobile (with or without battery backup), and Wall-Mounted options.



HEX 6+6+6

Intensity	1,60,000+1,60,000+1,60,000 ±10%
Number of LED	126 + 126 + 126



Mobile Model

Mobile Model with battery backup



HEX 6+6

Intensity	1,60,000 + 1,60,000 ±10%
Number of LED	126 + 126



HEX 6+5

Intensity	1,60,000 + 1,40,000 ±10%
Number of LED	126 + 95



HEX 6+4

Intensity	1,60,000 + 1,10,000 ±10%
Number of LED	126 + 76



HEX 6+3

Intensity	1,60,000 + 80,000 ±10%
Number of LED	126 + 57

# HEX SERIES

Equipped with advanced features

Light with  **GermanTechnology Arm**



HEX 5+5

Intensity	1,40,000 + 1,40,000 ±10%
Number of LED	95 + 95



HEX 5+4

Intensity	1,40,000 + 1,10,000 ±10%
Number of LED	95 + 76



HEX 5+3

Intensity	1,40,000 + 80,000 ±10%
Number of LED	95 + 57



HEX 4+4

Intensity	1,10,000 + 1,10,000 ±10%
Number of LED	76 + 76



HEX 4+3

Intensity	1,10,000 + 80,000 ±10%
Number of LED	76 + 57




HEX 3+3

Intensity	80,000 + 80,000 ±10%
Number of LED	57 + 57



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