NOVA.light

SERIES **800/600/700T**

MAJOR SURGERY

THE TOOL TO SAVE LIFE

MAXIMUM PASSION IN WHAT WE DO

You inspire us to develop technically outstanding, original and very personal medical solutions

WWW.NEXORMEDICAL.COM

VERS. 1.0 EN 05/23

NEXOR

HEALING ENGINEERING

HEALING
ENGINEERING

Technology and innovation are the driving forces hat can lead the medical industry into a new era

An era of wellness and care. An era built by and for people, where access to health is available to all and is the key to a better life

NEXOR
HEALING ENGINEERING

WE ARE FAMILY

Saving lives involves sacrifice, generosity, discipline, respect and the responsibility to care for family members, patients and society

HEALING INNOVATION

Research is the only way to make progress. We are dedicated to designing cutting-edge medical equipment to make life easier for healthcare professionals and enable them to carry out their work in the best possible way

CARING FOR THE FUTURE

We know that resources are limited and that every investment in equipment represents an evolution in healthcare spaces, so we offer products that are durable and easily upgradable

EFFICIENT HEALTH CARE

We enjoy designing technically outstanding, original and very efficient health care projects

CARE, COMMITMENT AND FLEXIBILITY

The medical industry is part of our DNA, for more than ***25 years*** our founders have lived closely its evolution. We are a family of doctors, friends and partners of professionals in the sector which allows us to deeply understand the customer´s needs

Our team is committed to best help our customer´s needs. From flexibility, knowledge and experience in the manufacturing process to every technical detail of the product, to the quick and direct access to contact decision-makers

MAXIMUM PASSION IN WHAT WE DO

We combine

GERMAN ENGINEERING

excellence and precision with

ITALIAN PASSION FOR DESIGN

NEXOR
HEALING ENGINEERING

MAXIMUM PASSION IN WHAT WE DO

You inspire us to develop technically outstanding, original and very personal medical products

MORE THAN 25 YEARS OF EXPERIENCE DESIGNING SURGICAL LIGHTS

Technology and innovation are the driving forces that can lead the medical industry into a new era, an era of wellness and care. An era built by and for people, where access to health is available to all and is the key to a better life

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NOVA.light

SERIES 800/600/700T

MAJOR SURGERY

THE TOOL TO
SAVE LIVES

TECHNICALLY
OUTSTANDING

NOVA.light offers a selection of LED SURGICAL LAMPS, developed and manufactured in Germany, with an intuitive interface, easily up-gradeable, combining technology, hygiene and ease of use. Providing outstanding performance and longevity thanks to high quality materials

Innovation saves lives and at **NEXOR Medical** we apply it every day to reduce the fatigue of medical professionals, improve their working conditions and ensure access to quality medical treatment for patients all over the world

We combine
GERMAN ENGINEERING
excellence and precision with
ITALIAN PASSION FOR DESIGN

NEXOR
HEALING ENGINEERING

TAKING CARE OFF
ALL STAKEHOLDERS

SURGEONS

Our mission is to enable healthcare professionals to focus on what matters most: **“The Patient”**

We understand that fatigue and stress can be major factors in a healthcare professional's work, so we strive to design products that offer maximum comfort and ergonomics, minimising fatigue, physical and emotional stress in daily work

MEDICAL STAFF

We design intuitive, efficient medical equipments while complying with all hygiene requirements, thus facilitating the work of the medical team

BIOMEDICAL ENGINEER

The **NOVA.light** series is a product that stands out for its simplicity, in installation and use. In addition, its design and photometric data are easy to understand, allowing any professional to operate the equipment intuitively

Its low maintenance translates into lower costs and maximisation of its life cycle. We offer assistance during installation and after-sales service, guaranteeing an optimum performance and longevity

NEXOR
HEALING ENGINEERING

OUTSTANDING DESIGN
UNIQUE BENEFITS

HIGHEST QUALITY MATERIALS

The use of materials such as Aluminium (which is infinitely more durable than PVC) and safety glass, also expands the product life cycle, preventing the lamp from scratching or turning yellow

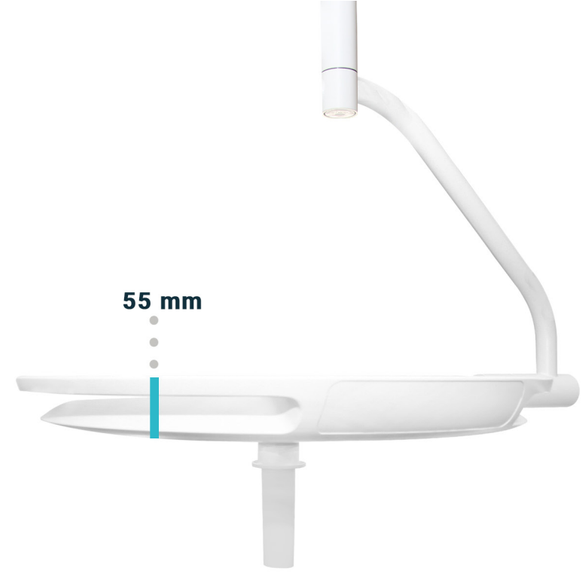
NEXOR
HEALING ENGINEERING

MONOCOQUE HOUSING

Designed, developed and exclusively made in Germany. **The Monocoque** lamp housing is milled out of a solid piece of aluminium

100% MADE IN GERMANY

The lean design at only **55 mm** offers one of the thinnest light head in the market



Safety
Stability
Cool
Laminar flow
Engineered for functionality and superior handling
Extremely rigid
Product life-cycle,
> 20 years

TWO TECHNOLOGIES FOR MAXIMUM EFFICIENCY

Fresnel Technology - Multicolour

Fresnel technology allows a greater concentration of light in a specific area, creating light effects that can help improve visibility and contrast during surgery. Our multi-colour technology allows the surgical light to emit different colours of light depending on the specific needs of the procedure

Improving the visibility of tissue and blood vessels during surgery

- **NovaLight 800**
  77 lenses / 77 LEDs
- **NovaLight 600**
  54 lenses / 54 LEDs

Colour temperature

The colour temperature technology of our **NOVA.light** series includes settings between 3.500K and 5.500K, allowing surgeons to quickly change the colour temperature according to the specific needs of the procedure

5.500K • • • • • • • • • • • 3.500K

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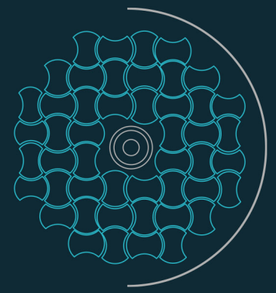


Reflector Technology - Multicolour

Nexor's multicolour reflector technology uses high quality and precision reflectors that allow a better distribution of the emitted light. Their power consumption is as low as "45 watts"

The arrangement of the reflectors (puzzle system) creates a homogeneous light emitting surface for maximum shadow resolution

- **NovaLight 700T**
  48 reflectors / 96 LEDs

Colour temperature

All lamps allow the surgeon to decide which colour temperature is most suitable during surgery, offering settings between 3.800K and 5.000K

5.000K • • • • • • • • 3.800K

HIGHEST
HYGIENE STANDARDS

The innovative and unique manufacturing method of the lamp housing milled out of a solid piece of aluminium offers a surface without holes and screws

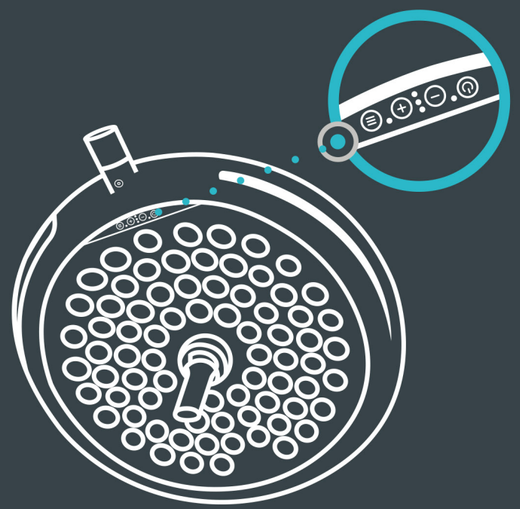
Avoiding acumulation of germsn on the light head and its suspension

These foundations form the ideal basis for perfect cleaning and hygiene

SENSOR
TECHNOLOGY

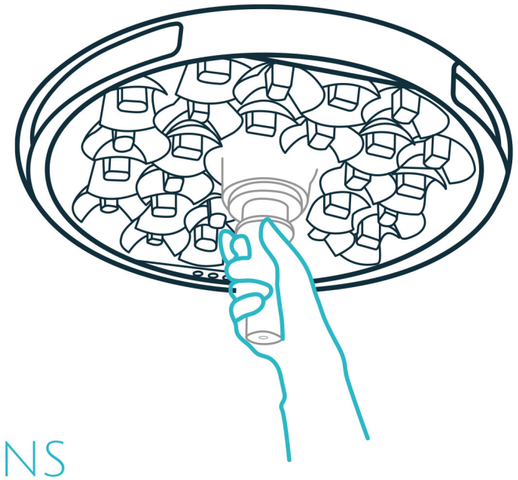
A newly designed integrated and intuitive control of the light allowing the surgeon to perform quick settings

A capacitive touch control embedded into the safety glass of the light head guarantees lifetime performance and absolute resistance



STERILE HANDLE

Intuitive, sterile and limitless



ONE HANDLE
THREE FUNCTIONS

The control of light intensity regulation and light field diameter adjustment on the sterile handle offers a high level of control for the surgeon at the operating table

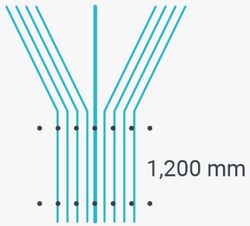
Our innovative sensor system integrated in the lamp handle allows the surgical staff to reposition the lamp body during the operation without inadvertently adjusting the field size

Easy one-handed control from the sterile field:

- Field diameter adjustment - Luminous intensity
- Luminous intensity - light intensity adjustment
- Positioning and high mobility

NEXOR
HEALING ENGINEERING

ILLUMINATION

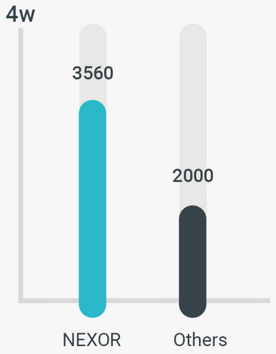


Illuminance and illumination depth

*Central illumination at a distance of 1 m is 160.000 lx

*Illumination depth L1 + L2 is 1,200 mm (RI 20%)

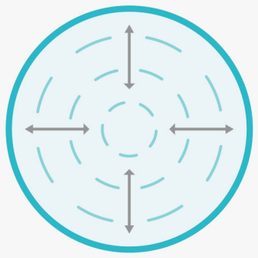
***According IEC 60601-2-41**



Energy efficiency

Our computer designed LED technology in combination with high performance LEDs is the most efficient optical system for surgical lights in the market, being 45W the maximum consumption per light head

Each W of power produces 3.560 Lux



Variable focus

All our surgical lights offer an adjustable focus in the range of 170 to 300 mm, allowing the light field to adjust to specific needs during surgery

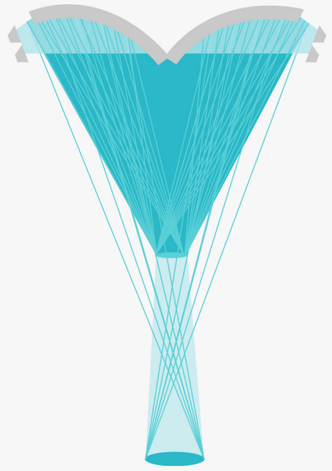
HEALING INNOVATION
KEY FEATURES OF NOVA.light

Ambi-Light

All **NOVA.light** products offer different options for endoscopic illumination. From a plain white, to a blue or green illumination mode*****

The objective is to optimise visual performance by reducing glare on the monitor and eye fatigue for the surgeon, allowing zoned lighting that creates the right illumination for everyone in the room (surgeons, anesthesiologists, medical staff)

* Optional



Passive Shadow Management

NOVA.light products has horizontally and vertically faceted computer-designed reflectors generating independent light beams, thus allowing to compensate for the reduction of individual beams due to obstacles

Optimised reflector positioning (puzzle) for maximisation of the light emitting surface and reduction of shadow casts

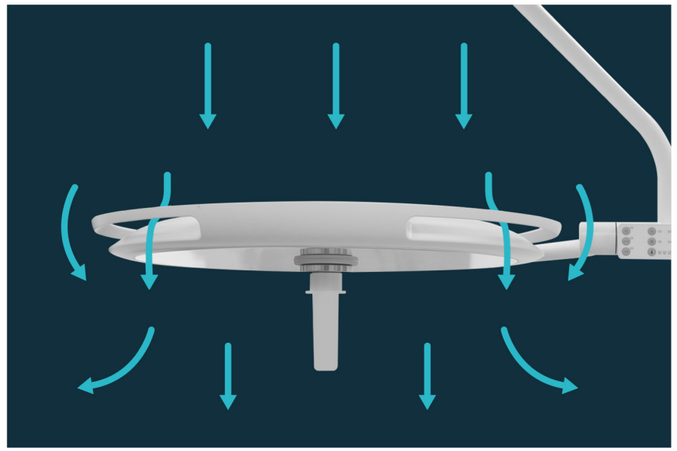
NEXOR
HEALING ENGINEERING

OTHER FEATURES

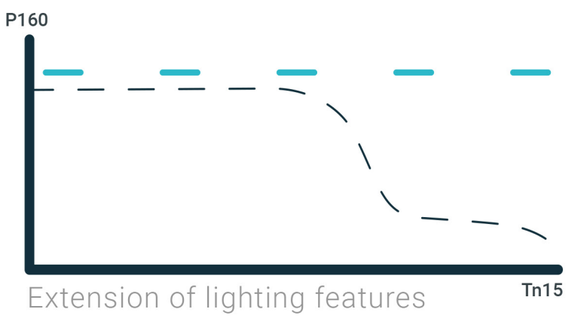
Laminar Air FlowAll

NOVA.light products have been tested following **DIN 1946** Part 4 to prove their suitability for work under Laminar Air Flow conditions

A flat **(55mm)** and aero-dynamic, design combined with a high energy-efficiency, producing almost no heat, makes this product best in class



NOVA-LUX
TURBO FUNCTION

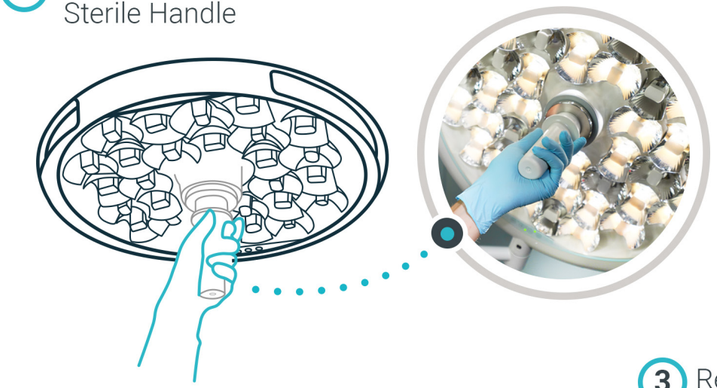


Extension of lighting features

- Innovative LED resetting system
- Maintains maximum lighting performance
- Lifetime **>60.000 hours**

One system different control options:

1 Lighting Control from Sterile Handle



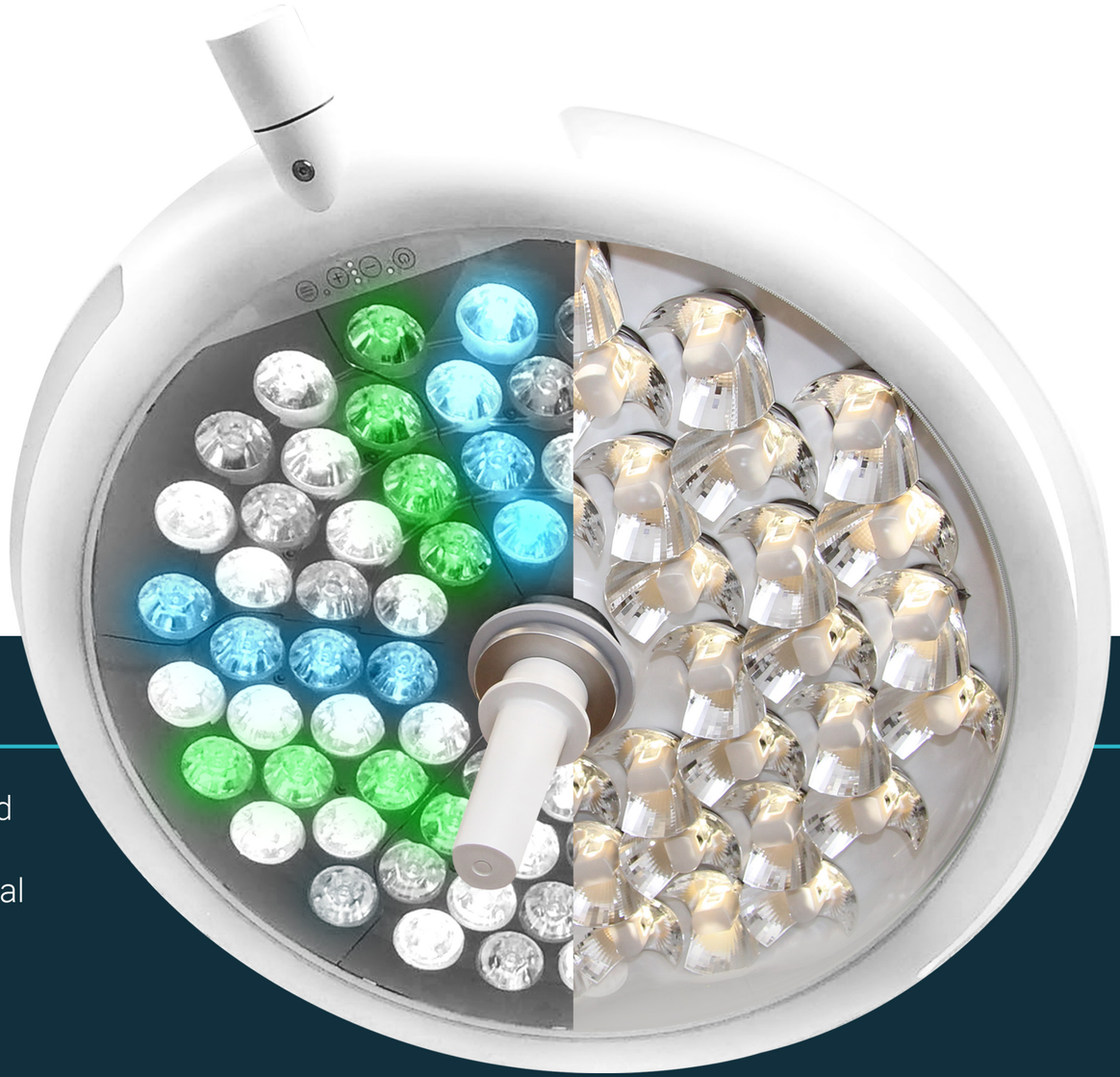
3 Remote control Bluetooth

2 Lighting Control from Key-Pad

NEXOR
HEALING ENGINEERING

NOVA.light
SERIES
MAJOR SURGERY

FRESNEL
TECHNOLOGY
MULTI - COLOUR



REFLECTOR
TECHNOLOGY
MULTI - COLOUR

N800 / 600

Multi-Colour OR Light allows a broad adjustment of colour temperature during surgery, depending on surgical application and tissue colour sensitivity

700T

The OR-Lights are equipped with a faceted and a highly reflective dual-reflector-system for improved light efficiency

NEXOR
HEALING ENGINEERING

NOVA.light

SERIES **800/600**

THE TOOL TO SAVE LIVES

AMBI.light BLUE/GREEN *COLOURED-LIGHTING:*

Studied to minimise the reflections and glare on monitors for endoscopic interventions

Tested to have improved work performance (less fatigue and strain on the eyes)

Possibility of daylight simulation between procedures

CENTRALISED SERVICE SLOT:

Allows quick and tool-free access to complete electronic of surgical light, reducing downtime in case of servicing to a minimum

NOVA-LUX TURBO FUNCTION:

Maintains maximum lighting performance over product life cycle

EXTREMELY FLAT **MONOCOQUE** HOUSING:

With high IP protection class allowing an easy disinfection of the lighting body

POSSIBILITY OF CHANGING INDIVIDUAL **LED'S:**

Reduces servicing costs throughout lifetime and facilitates technological upgrades

OTHER RELEVANT FEATURES **INCLUDE:**

Passive shadow management, presets, integrated interface to control light and camera, variable light field pattern, adaptative focus to variable height, deeper L1+L2, smaller minimum light field

NEXOR
HEALING ENGINEERING

NOVA.light

SERIES ***800/600***

CAMERA INTEGRATED

HD/4K

EASY ACCESS

Tool-free maintenance access

NEW LIGHTING

AMBI.light

SOLID BODY

Screwless, completely sealed with maximum hygiene

REMOTE CONTROL

MULTI-FUNCTIONAL STERILE HANDLE

Allows to control main functions of the surgical light by the surgeon

FRESNEL TECHNOLOGY

Optimized lighting, reduces consumption

ALUMINIUM

Infinitely more durable than PVC

NEXOR

HEALING ENGINEERING

NOVA.light
SERIES **800/600**

TECHNICAL SPECIFICATIONS TABLE
MAJOR SURGERY LIGHTS

DATOS TÉCNICOS	NOVA. light 800	NOVA. light 600
Dimming range	10 - 100%	10 - 100%
Light intensity in 1m distance (klx)	160	160
Intensity regulation (In 9 steps) at (Klx)	16 - 160	16 - 160
Endoscopic lighting	Yes | 5 - 10%	Yes | 5 - 10%
Light field (d10) at illuminance at a distance of 1 m (mm)	170 - 300	170 - 280
Color temperature (Kelvin) (Adjustable)	3.500 - 5.500	3.500 - 5.500
Color rendering index Ra	≥ 97	≥ 97
Red rendering index R9 / Skin rendering index R13	≥ 97	≥ 97
Depth of light field L1 + L2 (mm) 20%	1.200	1.200
Weight of light head (kg)	20	15
Dimensions L x A x A (mm)	697 x 708 x 55	586 x 597 x 55
Lifetime of LED light source (h)	> 60.000	3.500 - 5.500
IP Protection class	54	54
Power consumption (Watt)	45	36
Electrical light field adjustment	Yes	Yes
Integrared camera (central position)	HD / 4k	HD / 4k
Certification	CE IEC 60601-2-41	CE IEC 60601-2-41
Control options	Wall / Remoto Control	Wall / Remoto Control
Control	On OT Light dome	On OT Light dome
Supply voltage	100 - 230 VAC 50 Hz/60 Hz	100 - 230 VAC 50 Hz/60 Hz
Sterilizable handle	Yes available	Yes available
Operating/storage Humidity	5 - 95%	5 - 95%
Tolerance ±10%; technical speci□cations are subject to change		

NEXOR
HEALING ENGINEERING

NOVA.light

*SERIES **700T***

At **NEXOR MEDICAL** we continuously strive to improve our products and offer innovative and efficient solutions in surgical lighting. In this sense, the **NOVA.light 700T** has established itself as the best option for major surgery thanks to its advanced design and technology

The incorporation of multi-colour technology has been a major breakthrough in surgical lighting. This technology allows the surgeon to adjust the colour temperature of the surgical light according to the tissue structure, the surgical application and his or her own individual colour sensitivity. This means that the illumination is adapted to the specific needs of each surgery and the contrast perception and tissue definition are improved

In addition, the **NOVA.light 700T** features the efficient design of the **N700**, which includes faceted horizontal and vertical reflectors to generate separate light beams, improving energy efficiency and illumination uniformity

Nova-Lux turbo

this feature allows the intensity of illumination to be readjusted throughout the life of the LEDs, maintaining maximum light output

Colour temperature setting

3.800K to **5.000K**

(4 dimming levels in 4 steps)

Reflector technology

Provides excellent shadow resolution, without the need for complicated lighting management systems

NEXOR
HEALING ENGINEERING

NOVA.light

*SERIES **700T***

ONE SLOT
Tool free access for servicing

ALUMINIUM
Infinitely more durable than PVC

HD/4K
Cam integration

LIGHT EMITTING SURFACE
Safety glass

REMOTE CONTROL

REFLECTOR TECHNOLOGY
Based on reflectors

CAPACITIVE AND TOUCH CONTROL

MULTI-FUNCTIONAL STERILE HANDLE
Allows to control main functions of the surgical light by the surgeons

SOLID BODY
Screwless. Completely sealed. Maximum hygiene

NEXOR
HEALING ENGINEERING

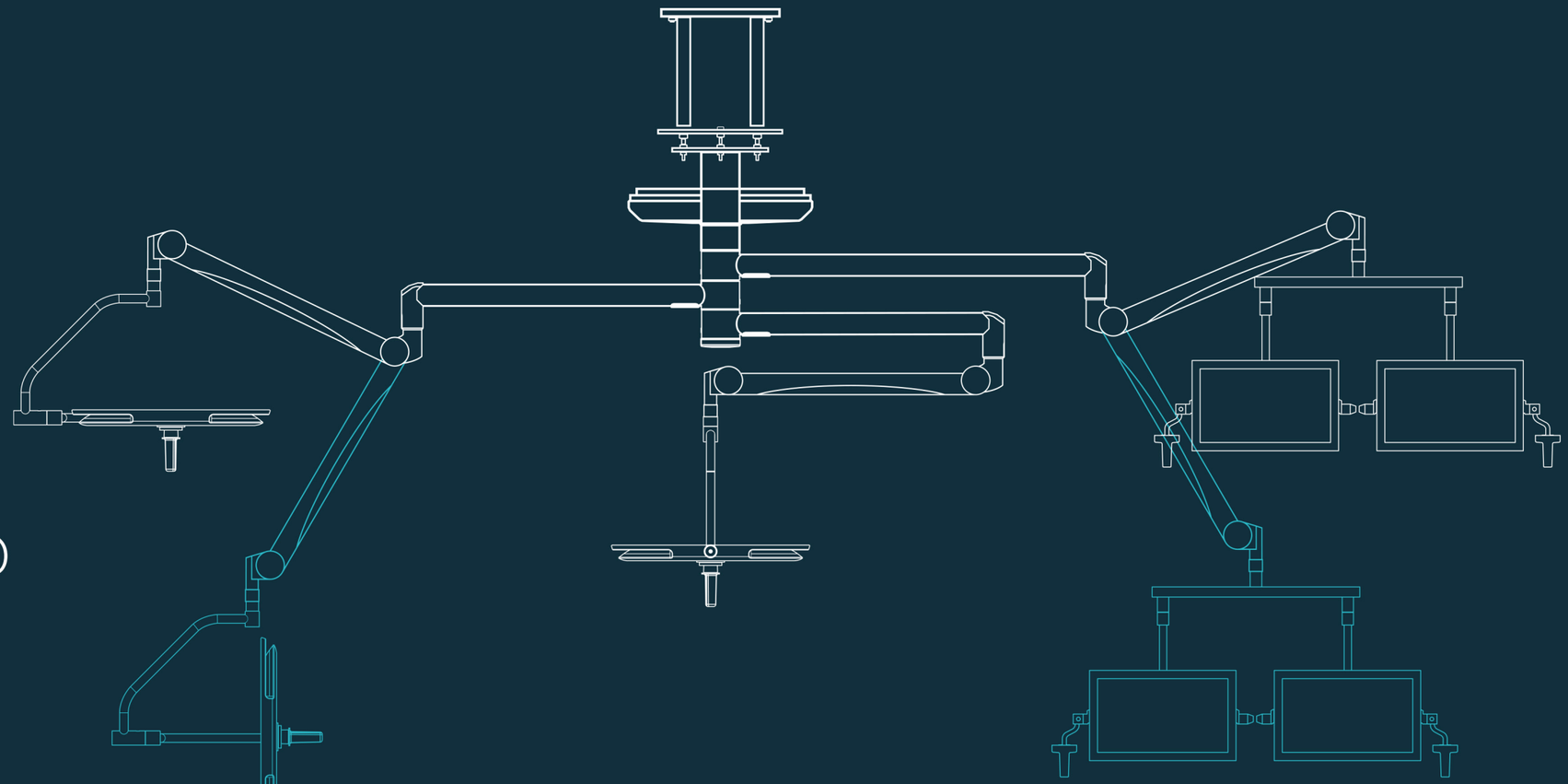
NOVA.light
SERIES **700T**

TECHNICAL SPECIFICATIONS TABLE
MAJOR SURGERY LIGHTS

TECHNICAL DATA	NOVA.light 700T
Dimming range	10 - 100%
Light intensity in 1m distance (klx)	160
Variable color temperature, in 4 steps of 400 (Kelvin)	3800 - 5000
Red rendering index R9 / Skin rendering index R13	≥ 97
Light field (d10) at iluminance at a distance of 1m (mm)	170 - 300
Depth of light field L1 + L2 (mm) 20%	1.200
Intensity regulation (In 9 steps) at (Klx)	16 - 160
Endoscopic lighting	Yes | 5 - 10%
Weight of light head (kg)	18
Dimensions L x A x A (mm)	697 x 708 x 55
Color rendering index Ra	≥ 97
Lifetime of LED light source (h)	> 60.000
IP Protection class	54
Power consumption (Watt)	42
Electrical light field adjustment	Yes
Integrared camera (Central position)	HD / 4k
Control options	On OT Light dome
Certification	CE IEC 60601-2-41
Control	Cardanic suspension / On the lamp head
Supply voltage	100 - 230 VAC 50 Hz/60 Hz
Sterilizable handle	Yes available
Operating/storage Humidity	5 - 95%
Tolerance ±10%; technical specifications are subject to change	

NEXOR
HEALING ENGINEERING

COMFORT AND MODULARITY



SUSPENSION ARM SYSTEM

Our hanging arm system, with **100% German technology**, is a versatile, architectural and modular solution for operating theatres

The NEXOR Suspended Arm offers maximum flexibility by installing up to four (4) extendable arms on a central axis

Nexor suspension arm system offers maximum flexibility by installing up to four extendable arms on a central axis. Our system makes it possible to adjust to new operating room requirements and offers multiple solution options, even after installation, quickly and easily. By doing so we provide planners and users with the freedom to upgrade and expand, thus securing the investments made for the future

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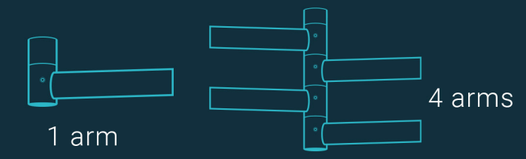
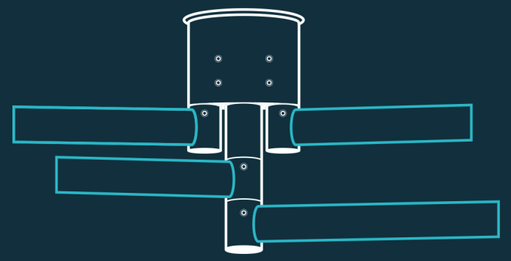
MULTIPLES CONFIGURATIONS

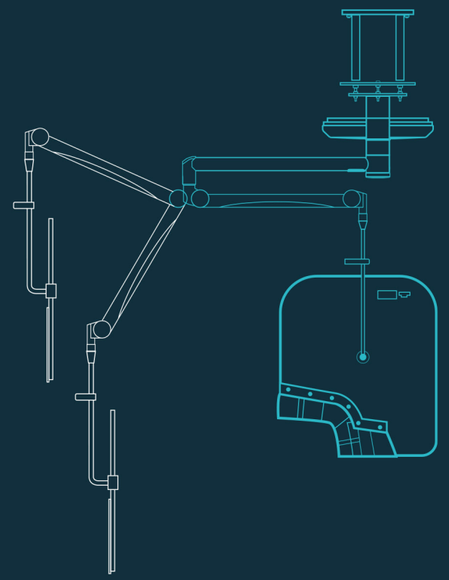
Configurable from 1 arm to 4 arms



Retrofit suspension

Specially designed for low ceilings or future upgrades, our central axis allows the arms to rotate on a central axis that can be extended to one or two arms and install between one and two lamps

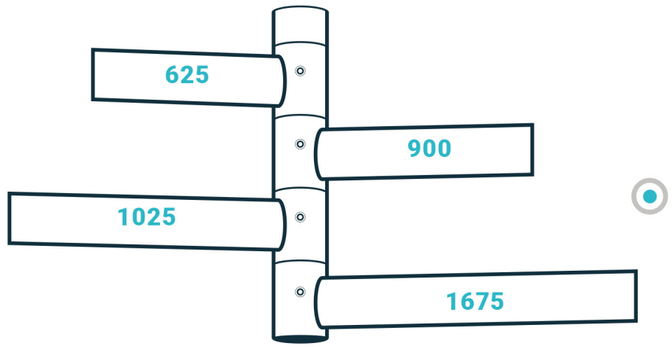




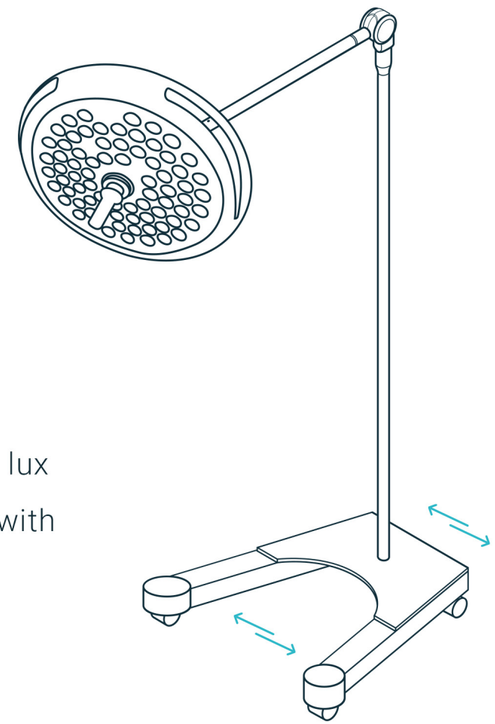
Multiple couplings

Dome, monitor, 4k camera, X Ray Shield

A wide variety of equipment can be mounted to any of our ceiling suspensions



El customizable arm length
from 625 to 1675 mm



NEXOR mobile version:

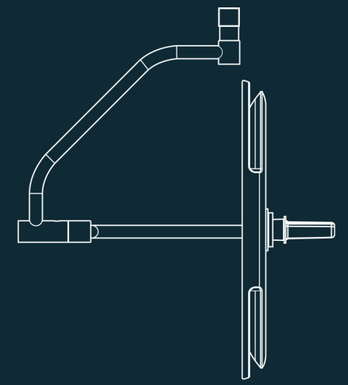
- High degree of mobility
- It has a braking system in 4 wheels
- High light intensity 160.000 lux
- Available in mobile version with battery

NEXOR
HEALING ENGINEERING

NEXOR CARDANIC

MULTI-DIRECTIONAL, ILLUMINATION AND MULTI-ANGLES

The cardanic suspension allows the light body to rotate 360°offering a maximum freedom of movement

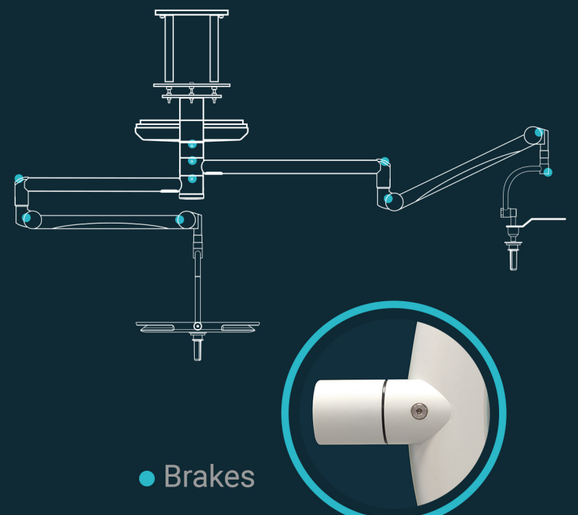


FLAT CARDANIC

Alternatively available as flat cardanic suspension for rooms with low ceiling heights

NEXOR BRAKING SYSTEM

The braking system of our **NOVA.light** series allows an easy positioning, as well as quick and indiviual adjustment of each pivoting element in order to deliver an improved useability during surgery



- Brakes

ACCESSORIES

3 CAMERA OPTIONS

- **NOVA.cam 4k**
  (1) WIRELESS
- **NOVA.cam HD**
  (2) WIRED
  (3) WIRELESS

All our integrated camera lights are designed to capture stunning images for clear and precise visualization of the working area during surgery

TECHNICAL SPECIFICATIONS TABLE
NOVA.cam

TECHNICAL DATA	HD	HD - WIRELESS	4K - WIRELESS
Image device, sensor	1/2.8 tipo Exmor CMOS	1/2.8 type Exmor CMOS	Sensor CMOS type 1/2,5
Video standards	1080p 50/60Hz	1080p 50/60Hz	4K 25p o 4K 30p
Lines x gaps	1920 x 1080 FullHD	1920 x 1080 FullHD	3840 x 2160 px
Number of efective pixels	Aprox. 2.38 MP	Aprox. 2.38 MP	Aprox. 8.51 MP
Zoom	10-times optical 12-times digital 120 x incl. optical zoom	30-times optical 12-times digital 360 x incl. optical zoom	20-times optical 12-times digital 240x incl. optical zoom
Aspect radio	16 a 9	16 a 9	16 a 9
Minimum Illumination (50%)	1,4 lux	1,4 lux	1,6 lux
Focus distance	f = 3,8 mm (wide) up to 38 mm (tele)	f = 4,3 mm up to 129 mm	f = 4,4 mm up to 88,4 mm
Signal to noise ratio S/N	> 50dB	> 50dB	> 50dB
Operating temperature	0°C to 45°C	10°C to 40°C	10°C to 40°C
Power consumption	6 V to 12 V DC / 3,7 W	12 V to 42 V DC / 6 W	12 V to 42 V DC / 7 W
Minimum working distance	10 mm (wide end) 800 mm (tele end)	10 mm (wide end) 1200 mm (tele end)	80 mm (wide end) 800 mm (tele end)
Power supply	via OR light	via OR light	via OR light
Picture rotation	Mechanical	Electrical	Electrical
Video outputs	HDSDI	DVI	DVI
Focus	Auto or Manual	Auto or Manual	Auto or Manual
Aperture	Auto or Manual	Auto or Manual	Auto or Manual
White balance	Auto or Manual	Auto or Manual	Auto or Manual
Freeze function	Yes	Yes	Yes
Weights of camera	1 Kg	1 Kg	1 Kg
Tolerance ±10%; technical specifications are subject to change			

NEXOR
HEALING ENGINEERING

DOUBLE
MONITOR VERSION

NOVA.light

Monitor yoke

This is the ideal accessory for surgical monitors (21-32 inch). It is available as a single and double yoke, and both versions are presented with or without cover

- It is able to support up to **18kg** (single version)
- It is able to support up to **15kg** (double version)
- With an adjustable tilt angle of **±20°**, with a sterilisable handle

SINGLE
MONITOR VERSION

NEXOR
HEALING ENGINEERING

REMOTE
control

Compatible with **NOVA.light 800/600/700T**, Nexor Medical offers you the following features:

Connections are made via Bluetooth

- Wall with vesa plate

- Portable tablet with battery

From one to three lamps and three camera systems can be controlled

DISPOSABLE HANDLES
with adapter*

Our sterile, single-use plastic sleeve for the lamp handle prevents contamination of the operating field when moving or adjusting the lamp

It is flexible and easy to fit and can be slipped over the handle adapter

***Transparent sheaths are available without adapter**

BACK-UP
system

The backup system guarantees the continuity of surgeries in case of power failure

- Autonomy of 6 hours

MEDICAL VIDEO
recorder

Nexor Medical's IPS720 is an all-in-one medical video recording system. Capture still images or record extended sessions from live video feeds

IPS720 can simultaneously record to internal and external memory, providing a real-time video solution

Lightweight and portable, IPS720 features up to 1080P video recording at 60 Hz. System controls can be managed via the display and buttons on the front of the unit

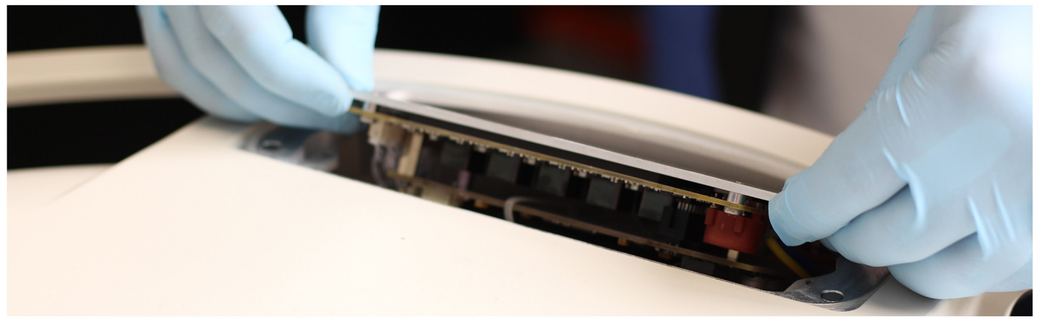
- Full-HD image capture and video recording
- HDMI, Display Port, SDI input ports
- 2 TB internal hard disk
- Possibility to connect audio and foot switch
- Simultaneous recording to hard disk and external pen drive
- Possibility to record from 2 video sources in parallel

NEXOR
HEALING ENGINEERING

SERVICES

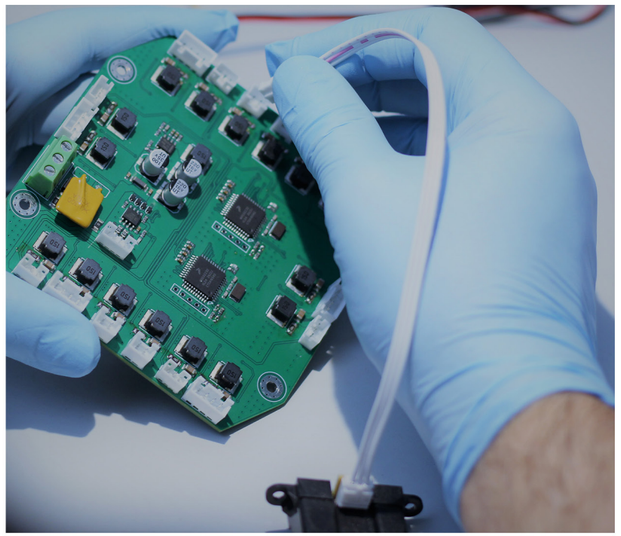
QUICK SERVICE ACCESS

All **Nova.light** products provide access to the electronic boards through a quick access service slot with a very reduced number of tools and avoiding to dismantle the light, which leads to a reduced down-time of the OR



SINGLE LED REPLACEMENT

Optical system allows single LED replacement, reducing costs for spare parts



PREVENTIVE MAINTENANCE WITH XSL SOFTWARE

Allows adjustment of the electrical and **PHOTOMETRIC** parameters of the **LAMP** throughout its lifetime, guaranteeing constant light output throughout the product's life cycle

- Extremely short downtimes thanks to technical speed
- State-of-the-art service access
- Screwless service access with a magnetic locking mechanism to the LED control panel
- Clean, hygienic surface and perfect working conditions for technical staff

NEXOR
HEALING ENGINEERING

SOCIAL. sustainability

EQUALITY
DIGNITY
RESPECT

NEXOR
HEALING ENGINEERING

SOCIAL. sustainability

THERE IS
NO GENDER
DIFFEERENCE

- We have been doing modular cladding projects **since 2009**
- For more than **25 years** our team members have been active in the medical industry
- Over **100 projects** have been executed in more than **15 countries** worldwide, leading to more than **250 operating** rooms including Hybrid OTs and Cathlabs
- Additionally, we have executed a wide range of advanced GMP standard labs
- We are proud to say that our multicultural and multidisciplinary team spans the globe, spanning all **5 continents**

WE CARE FOR THOSE WHO CARE BUILDING TOGETHER A HEALTHIER AND SAFER WORLD

NEXOR
HEALING ENGINEERING

THERE IS NO PASSION TO BE FOUND IN PLAYING SMALL

So, at **NEXOR**, we work hard and never give up to go the extra mile towards our partners and customers

Rafael Muñoz Navarro
Managing Director

WE MAKE IT SIMPLE, FUNCTIONAL AND EASY

Our mindset is to design technically outstanding, customized and highly efficient health care projects and solutions, in order to create value in healthcare by creating superior healing environments

Stefano Agostinelli
Managing Partner

NEXOR
HEALING ENGINEERING

IMQ CERTIFIED
QUALITY MANAGEMENT SYSTEM
ISO 13485: 2016

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