

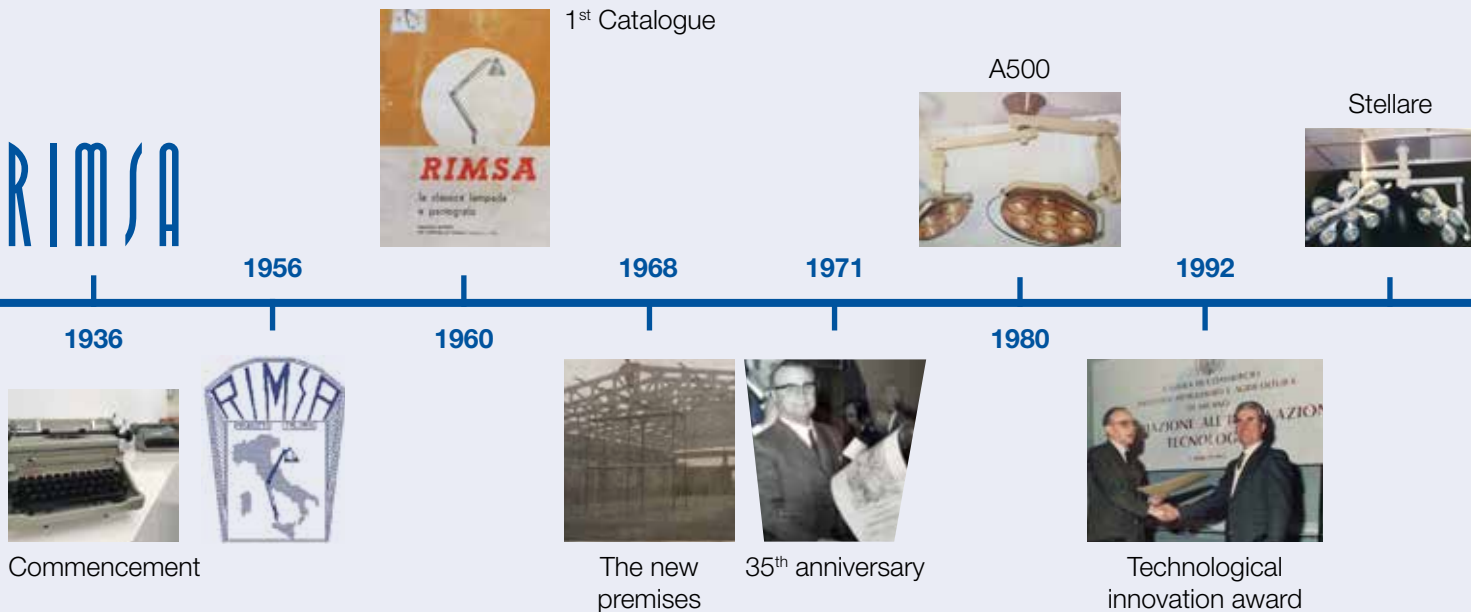
1936-2016
80
YEARS

RIMSA

General Catalogue

Our history

A tradition for innovation



RIMSA, which stands for Riparazione Macchine da Scrivere e Affini (Repair of Typewriters and Allied Products), was established in 1936 by Palmino Longoni. Since then RIMSA has always been run by Longoni family, now in its third generation. Passion, skill and foresight are the elements that have allowed the company to compete on the market by adapting products to changing times. From typewriters to screwdrivers to assemble

furniture, from desk lamps to those for technical applications, right up to the manufacture of surgical lamps for medical use. Noteworthy was the company's ability to transform and innovate products in the medical field. In the 80's, halogen lights replaced incandescent lighting. Hence the A series was introduced with glass dish reflectors and thin-layer vacuum treatment. After the A series came the Stellare series, the first

open spoke lamp. This model was awarded the "Technological Innovation" Certificate of the Milan Chamber of Commerce. In 1996, the D series was designed; an elliptical and bi-elliptical single lamp with central halogen bulb and reserve bulb, with automatic switching device in case of failure. In the new millennium, the intuition and inventiveness of Gaetano Longoni, helped by his sons Carlo and Paolo, produced the first LED lamp in the world

(September 2002). This consisted of 5 luminaires each provided with LED and elliptical reflector specially designed to reflect the light rays; hence the name PENTA-led. The first PENTA-led was exhibited in Düsseldorf in November 2002 to the wonder and amazement of experts. Research, intuition, passion, expertise and innovation are the five adjectives best able to describe PENTA-led.

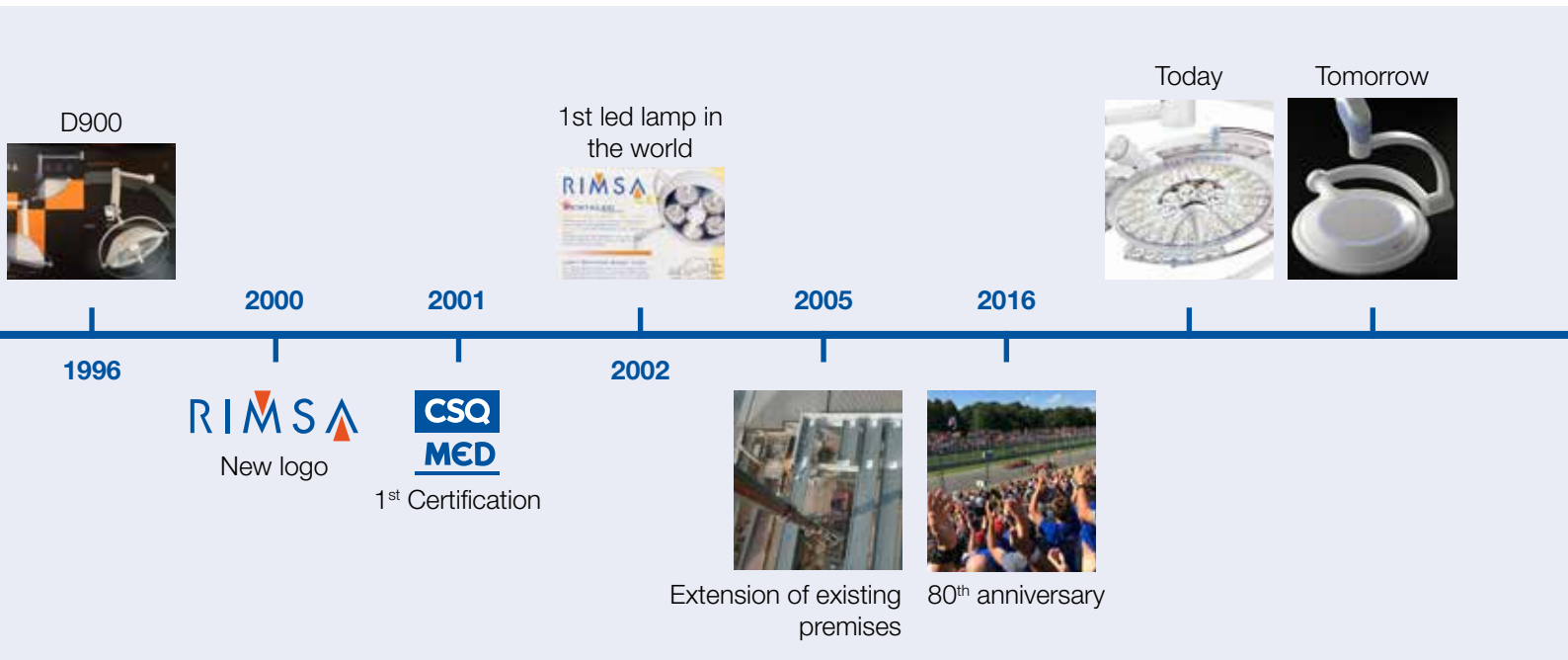
1936-2016
80
 YEARS

**Determination
 and Passion,
 the art
 of innovating**

Progress is man's endeavour to improve over time, to open up new horizons, to achieve new goals, and all this before others. Those who plan go beyond the present, imagine the future and find their way around in a new dimension.

Reaching this dimension requires "Determination and Passion". RIMSA holds the world record for having designed the first LED scialytic lamp in the world (patent 9/2002). Consolidated concepts such as "WHITE

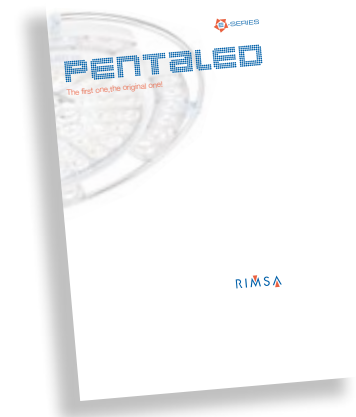
LIGHT without colour shadows" and "INDIRECT LIGHT" are the value added of our product, to provide comfortable lighting without glare. In our 80th anniversary, we are always first, unique and original to give light to ideas.



PENTALED -SERIES

Electronic diameter adjustment

Light has a crucial affect on man's ability to work. Proper lighting makes for comfortable working conditions, reduces stress levels, minimises the feeling of tiredness and increases productivity.



PENTALED81 is a hi-tech product designed to guarantee excellent performance levels.

81 elliptical reflectors split into 9 modules, each containing 9 LEDs. The lamp lens is designed to guarantee perfectly focused lighting, i.e. without the need to focus the light every time the dome is moved.

The light is pre-focused at different distances (from 80 cm to 200 cm).

The E-View system lets the surgeon adjust the extent of the lit field to get the right type of light for each surgical procedure. The light structure of the lamp makes it easy to handle and yet still very stable.

The indirect light provided by all PentaLED lamps guarantees cold light, depth and no stress or dazzling for the surgeon. This is due to especially calculated parabolic dishes that reflect the entire spectrum of light emitted by each LED lamp in a punctiform manner, without dispersion. This means:

- No dazzling effect
- Mixing of luminous rays before reaching the operating field
- 3D illumination of the operating field
- No shadows
- Well defined illuminated area without uncontrolled light rays

Thanks to the physical principle of indirect light, the surgeon and his/her assistants are never disturbed by the light and can operate without stress to the eyes and, most importantly, without becoming dazzled.



-DEEP The centre of the lamp is fitted with an extra 9-LED module with special parabolic dishes specifically designed to reflect deep light. E-deep means the surgeon can operate with perfect 3D lighting, especially in cavities.

-VIEW Ideal for the following surgical procedures: thoracic surgery, abdominal surgery, caesarean births. In all the above procedures, the surgeon must be able to operate in an extensive field lit with high intensity light. An additional lens called E-View (Extended-View) makes it possible to expand the lit field to up to 30 cm with 6000 Lux at the edges without affecting the light intensity at the centre (Ec).

Recommended use	81	105	30E
Abdominal/general surgery	■	■	–
Heart/vascular/thoracic surgery	■	■	▣
Traumatology/Emergency OR	■	■	▣
Orthopaedics	■	■	▣
Neurosurgery	■	▣	■
Gynaecology	▣	▣	■
Urology/TURP	■	■	■
ENT/Ophthalmology	–	–	■
Endoscopy/Angiography	▣	–	■
OMF/Aesthetic	▣	–	■
ER	■	▣	■

■ recommended ▣ alternative



PENTALLED30E is especially recommended for operating theatres where the surgeon needs a small lamp to avoid interference with other overhead equipment.

Excellent for oral and maxillofacial surgery and aesthetic plastic surgery. It has 30 elliptical reflectors split into 6 modules, each containing 5 LEDs, providing 140,000 Lux. An aluminium ring runs around the dome for easier positioning.

The E-View system lets the surgeon adjust the extent of the lit field to get the right type of light for each surgical procedure.

PENTALLED105 is the top of the range product. It has a central module like the PENTALLED81 lamp and 4 side petals, each fitted with 6 LEDs radiating outwards.

This configuration offers two great advantages:

- Increased scialytic effect
- Increased depth of field thanks to the double focalisation E-focus.

The central and side modules are designed to provide lighting at two different focal distances and thus guarantee greater depth of light and constant light intensity at 100-120 cm, without losing focus.

The E-deep module is fitted at the centre of the lamp: this has 9 LEDs with special parabolic dishes designed to reflect the light at depths. E-deep means the surgeon can enjoy excellent 3D lighting, especially in cavities.



Performances

	81	105	30E
Light intensity at 1 m distance (Ec)	160 Klx	160 Klx	140 Klx*
Out reflector diameter	63 cm	79 cm	40 cm
Color temperature: double selection	4500/5000 °K	4500/5000 °K	4500/5000 °K
Color rendering index (CRI)	95 Ra	95 Ra	95 Ra
Light field diameter adjustable from-to	14-32 cm	20-32 cm	13-27 cm
Diameter adjustment	Electronic	Electronic	Electronic
Depth of illumination (L1+L2) at 20%	103 cm	100 cm	95 cm
Depth of illumination (L1+L2) at 60%	68 cm	47 cm	66 cm
Total radiated energy Ee where the illuminance reaches max level	590 W/m ²	552 W/m ²	488 W/m ²
Ratio between radiated energy Ee and illuminance Ec	3,69 mW/m ² -lx	3,45 mW/m ² -lx	3,50 mW/m ² -lx
Average led life	> 60,000 hours	> 60,000 hours	> 60,000 hours
Electrical absorption	90 VA	150 VA	60 VA
Control of the illuminance	20-100%	20-100%	20-100%

*available special version 160,000 Lux

PENTALED -SERIES

Manual diameter adjustment

Right from its earliest days, RIMSA has always had a clear goal: to satisfy surgeons' needs.



RIMSA is fully aware that the key to meeting this goal is INNOVATION. Designers of the world's first scialytic lamp using LED technology (patented in September 2002), RIMSA now applies the experience it has gained over the years to its new PENTALED N-Series. **The indirect light provided by all PentaLED lamps guarantees cold light, depth and no stress or dazzling for the surgeon.** This is due to especially calculated parabolic dishes that reflect the entire spectrum of light emitted by each LED lamp in a punctiform manner, without dispersion. Thanks to the physical principle of indirect light, the surgeon and his/her assistants are never disturbed by the light and can operate without stress to the eyes and, most importantly, without becoming dazzled.

PENTALED63N has 72 elliptical reflectors split into 8 modules, each containing 9 LEDs. The modules are mechanically focused rotating the sterilisable handle. The multiplicity of the luminous sources and the elliptical geometry of the parabolas studied to reflect in the depth the light beams generated by the Leds, grant scialytic light for a three-dimensional illumination without shadows.

- **Manual focus** The manual focalization inside the sterile area grants a precise and immediate control of the light field. The Focus function is activated by the surgeon rotating the sterile central handle. The possibility of adjusting the focalization every time the lamp is moved, allows to optimize the light flux and adapt the light field diameter according to the different surgeries.
- **White light** Nature has always inspired man's every discovery! The sun is the light source par excellence and its rays emit monochromatic light, i.e. identical colour. Using this as a starting point, RIMSA has designed lamps that use only "white light" LEDs to avoid the risk of surgeons perceiving variations in the colour temperature (°K) within the operating field and to prevent unnecessary coloured shadows.
- **Indirect light** The use of indirect light makes for: 3D illumination of the operating field, no shadows, no risk of dazzling.





PENTALED30N is especially recommended for operating theatres where the surgeon needs a small lamp to avoid interference with other overhead equipment. Excellent for oral and maxillofacial surgery and aesthetic plastic surgery. It has 30 elliptical reflectors split into 6 modules, each containing 5 LEDs, providing 140,000 Lux. An aluminium ring runs around the dome for easier positioning.

A central sterilizable handle facilitates positioning of the lamp. Focalization and light field diameter can be easily adjusted moving the central handle inside the sterile area.

Recommended use	63N	30N
Abdominal/general surgery	■	–
Heart/vascular/thoracic surgery	■	▣
Traumatology/Emergency OR	■	▣
Orthopaedics	■	▣
Neurosurgery	■	■
Gynaecology	▣	■
Urology/TURP	■	■
ENT/Ophthalmology	–	■
Endoscopy/Angiography	▣	■
OMF/Aesthetic	▣	■
ER	■	■

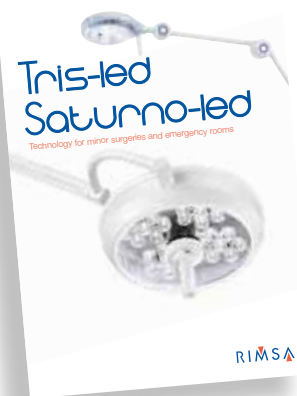
■ recommended ▣ alternative

Performances	63N	30N
Light intensity at 1 m distance (Ec)	160 Klx	140 Klx*
Out reflector diameter	63 cm	40 cm
Color temperature: double selection	4500/5000 °K	4500/5000 °K
Color rendering index (CRI)	96 Ra	96 Ra
Diameter and focus adjustment	Manual	Manual
Light field diameter adjustable from-to	16-34 cm	13-30 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 60%	51 cm	70 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 20%	108 cm	115 cm
Control of the illuminance	20-100%	20-100%
Total radiated energy Ee where the illuminance reaches max level	586 W/m ²	496 W/m ²
Ratio between radiated energy Ee and illuminance Ec	3,66 mW/m ² ·lx	3,50 mW/m ² ·lx
Average led life	> 60,000 hours	> 60,000 hours
Electrical absorption	70 VA	60 VA

*available special version 160,000 Lux

Tris-led

130 Klx 4300 °K



The radial pattern of the lenses and the large diameter of the reflector (40 cm) eliminate shadows and provide three-dimensional lighting.

This is a surgical lamp with exceptional technical performance and excellent operating versatility. It is particularly suitable for minor surgery, gynaecology and first aid.

The dome is reduced in size and contains four modular beams, each with 7 LEDs arranged in a radial pattern so as to eliminate shadows and provide deep three-dimensional lighting.

The manual focalization grants a precise and immediate control of the light field.

The Focus function is activated rotating the central handle.

The possibility of adjusting the focalization every time the lamp is moved, allows to optimize the light flux and adapt the light field diameter according to the different surgeries.

The light intensity can be adjusted using the membrane keyboard on the light head.



Recommended use	TRIS-LED
Abdominal/general surgery	–
Heart/vascular/thoracic surgery	–
Traumatology/Emergency OR	☑
Orthopaedics	☑
Neurosurgery	■
Gynaecology	■
Urology/TURP	☑
ENT/Ophthalmology	■
Endoscopy/Angiography	■
OMF/Aesthetic	■
ER	■

■ recommended ☑ alternative

Performances	TRIS-LED
Light intensity at 1 m distance (Ec)	130 Klx
Out reflector diameter	40 cm
Color temperature	4300 °K
Color rendering index (CRI)	97 Ra
No. of Leds	28
Diameter and focus adjustment	Manual
Light field diameter adjustable from-to	26-38 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 60%	71 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 20%	150 cm
Ratio between radiated energy Ee and illuminance Ec	3,53 mW/m ² -lx
Total radiated energy Ee where the illuminance reaches max level	459 W/m ²
Average led life	> 60,000 hours
Electrical absorption	70 VA



Pentaled 28

PENTALED 28 and PENTALED 12 are a concentration of unparalleled-performance technology, the best for a lamp for ambulatories and minor surgery.

Their compact dimensions and extremely handy structure are permeated by the strong determination of Rimsa heart, a synonym of high technology, quality and performance ever since. The thin dome with two convenient side grips ensures easier positioning and adjustment and reduces overall dimensions. The conformity to International rule IEC 60601-2-41 makes them suitable for: surgeries, first aid station, intensive care, recovery room, gynaecology, minor surgeries. White light, cold light, sterilizable handle, manoeuvrability, long lifetime are only some of the great features of Pentaled 28 and Pentaled 12.

PENTALED 28 **120,000 Lux @ 1 m**

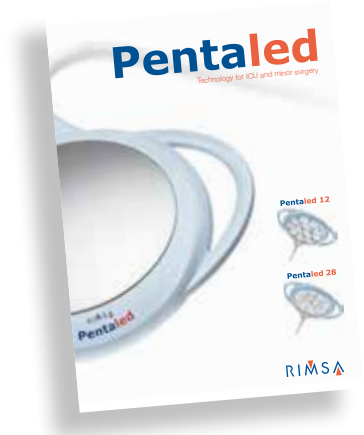
This lamp offers exceptional technical performance and great operating versatility. It is particularly suitable for minor surgery, gynaecology and emergency room.

The dome consists of 28 LED lenses arranged radial fashion to suppress shadows and ensure three-dimensional lighting.

The modular design of the LEDs ensures light continuity even in the rare case of a fault affecting an individual LED.

The high efficiency of the LED sources and the low current absorption permit obtaining very low IR emissions and a cold light in the operating field. Light intensity is 120,000 Lux.

Focusing and light field adjustment are achieved by turning the central knob. Through a digital membrane, the switch-on and switch-off functions can be accessed, the light intensity can be adjusted and the colour temperature can be changed 4500-5000 °K.



PentaLED 12



PENTALED 12 100,000 Lux @ 1 m

The fact that the reflectors are arranged close to one another permits obtaining a light that is always focused. PENTALED 12 makes use of the physical principle of reflection and indirect light.

Twelve elliptic reflectors reflect the light rays emitted by the LEDs on the area to be lit up, thereby obtaining a light intensity of more than 100,000 Lux at a distance of 1 metre.

The indirect light has the following advantages:

- it does not dazzle
- it does not strain the eyes and favours concentration
- it meets all the visual needs in the diagnostic and minor surgery sphere.

Recommended use

	28	12
Preparatory room	☑	■
Intensive care	☑	■
Outpatient	■	■
Dermatology	-	☑
Plastic surgery	■	■
ER	☑	-

■ recommended ☑ alternative

Performances

	28	12
Light intensity at 1 m distance (Ec)	120,000 Lux	100,000 Lux
Color temperature	4500/5000 °K	4500 °K
Color rendering index (CRI)	94	96
Light field diameter	110-330 mm	160 mm
Depth of illumination IEC 60601-2-41 (L1+L2) at 60%	88 cm	77 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 20%	155 cm	150 cm
Ratio between radiated energy Ee and illuminance Ec	1,60 mW/m ² -lx	3,66 mW/m ² -lx
Total radiated energy Ee where the illuminance reaches max level	231 W/m ²	366 W/m ²
Electrical absorption	57 VA	35 VA
Average led life	> 60,000 hours	> 60,000 hours
Control of the illuminance	20-100%	50-100%



Saturno-led

This is a surgical-type lamp suitable for minor surface-operation surgeries, gynaecology and first aid.

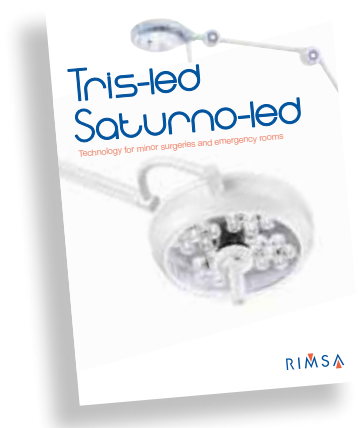
The radial pattern of the beams and the large-diameter reflector (195 mm) eliminate shadows and provide three-dimensional lighting.

The reduced emission of IR rays by the LEDs together with the low power used permit obtaining a very low heat emission to the benefit of patient and doctor comfort.

The fact that the beams are close together means they do not have to be focused. By pressing the digital key K on the control keyboard, two different tones of white light can be selected – 4000 °K and 4500 °K – without altering the light intensity.

The lamp is very easy to move thanks to the lightness of the aluminium support structure. Adjustable clutch bearings are fitted on each light joint.

For environments in which power supply continuity cannot be guaranteed, it is best to purchase an automatic re-charge battery unit.



Recommended use

Recommended use	SATURNO-LED
Preparatory room	■
Intensive care	■
Outpatient	■
Dermatology	▣
Gynaecological examination	▣
Recovery Room	■

■ recommended ▣ alternative

Performances

Performances	SATURNO-LED
Light intensity at 1m distance (Ec)	50 klx
Out reflector diameter	19,5 cm
Color temperature	4.000/4.500 °K
Color rendering index (CRI)	95 Ra
Light field diameter	28 cm
Depth of illumination IEC 60601-2-41 (L1+L2) at 60%	120 cm
Control of the illuminance	25-100%
Total radiated energy Ee where the illuminance reaches max level	163 W/m ²
Ratio between radiated energy Ee and illuminance Ec	3,27 mW/m ² *lx
Average led life	> 60.000 hours
Electrical absorption	17 VA

primaled

With its appealing design, PRIMALED is a concentration of unparalleled-performance technology, the best for an observation lamp.

It consists of 9 LED lenses split up into two separate 6 + 3 circuits. The lamp lens has been designed to provide focused and deep lighting. The diameter of the lighted field is 15 cm @ 0.5 m.

The Ergo_Spring balancing system makes PRIMALED very easy to handle and stable.

PRIMALED is suitable for any type of installation, from the doctor's surgery to the intensive-care unit. It is the first ever examination lamp to integrate an ambient light option as well as the traditional concentrated light.

This function can be activated by simply pressing a key.

Colour changing (4000-4500 °K), sterilisable handle, long lifetime of 60,000 hours, high light intensity of 110,000 Lux at 0,50 m are just some of the great features of this lamp. PRIMALED is available with flexible and joint arm.



Recommended use

	PRIMALED
Preparatory room	–
Intensive care	■
Outpatient	■
Dermatology	■
Gynaecological examination	■
Recovery Room	■

■ recommended ■ alternative

Performances

	PRIMALED
Light intensity at 0,5 m distance (Ec)	110,000 Lux
Out reflector diameter	19,5 cm
Color temperature: double selection	4000/4500 °K
Color rendering index (CRI)	95 Ra
d ₁₀ Light field diameter @ 50 cm (Ec)	150 mm
Total radiated energy Ee where the illuminance reaches max level	294 W/m ²
Ratio between radiated energy Ee and illuminance Ec	3,09 mW/m ² ·lx
Electrical absorption	22 VA
Control of the illuminance	25-100%



Fixing systems



OBSERVA

The quality of artificial lighting is of primary importance and is directly proportionate to the quality of the service to be provided.

RIMSA has designed a broad range of observation lamps for surgery use, able to cater to various medical requirements.



ALFA-LED

Three LED light sources with coinciding lenses and polycarbonate protection shield which provide a deep cylindrical light with highly reduced heat irradiation.

Each LED integrates a resistance to ensure the continuous operation of the lamp even in the rare case of a LED fault

The flexible arm, for easy light adjustment, is 60 cm long and is covered by a smooth white shrink-wrap sheath for easier cleaning and disinfection.

A06

Aluminium reflector compartment with no. 2 dichroic 20 W 12 V 10° IRC halogen bulbs and protection glass.

Ergonomic movement grip and articulated arm with mechanical clutches.

The light bulbs come on together and in case of a fault affecting a light source, you do not remain in the dark.

L88

Especially suitable for dermatological use and wherever magnifying in general is needed.

This model features a biconvex magnifying lens in optical glass with Ø 120 mm.

It features a polycarbonate screen for protecting the light source.

ALFA

Lamp featuring 35 W 12 V 10° IRC dichroic halogen bulb housed inside the reflector and protected by a tempered glass shield.

The reflector is of reduced size to allow greater freedom of movement.

The flexible arm ensures easier light positioning and is 60 cm long and covered with a white sheath easy to clean.

With its appealing design, the OBSERVA series is a concentrate of technology with unparalleled performance; the very best in terms of observation lamps. The articulated arm provides perfect lamp rotation and stability, while the flexible arm ensures easy light adjustment.

RIMSA OBSERVA Series is fully in compliance with Directives 93/42EEC and 2007/47 EC and bear the CE mark as Class I device. The Observa lamps are in conformity with the general IEC 60601-1 standard and the specific IEC 60601-2-41 standard.

ALFA lamp is in compliance with Directives 73/23 EEC and 2006/95 EC. It bears CE mark as a lighting device and not as a medical device.

Fixing systems



Recommended use

	ALFA-LED	A06	L88	ALFA
Outpatient	■	■	■	■
Dermatology	▣	▣	■	▣
Gynaecological examination	■	▣	-	■
Neonatology	■	-	-	-

■ recommended ▣ alternative

Performances

	ALFA-LED	A06	L88	ALFA
Type of lighting	LED	HALOGEN	FLUORESCENT	HALOGEN
Light intensity at 50 cm	35,000 lux at 50 cm	40,000 lux at 40 cm	550 lux at 50 cm	30,000 lux at 40 cm
Out reflector diameter	86 mm	140 mm	230 mm	104 mm
Color temperature	4200 °K	3000 °K	4550 °K	3000 °K
Color rendering Index (CRI)	95 Ra	93 Ra	90 Ra	93 Ra
Light field size at 50 cm	140 mm	180 mm	-	100 mm
Primary voltage	100-240 V	230/240 V	220/240 V	230 V
Average led life	> 60,000 hours	> 5,000 hours	> 5,000 hours	> 5,000 hours
Electrical absorption	20 VA	40 W	33 VA	35 W



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RESEARCH & COMPONENTS

HAND-MADE IN ITALY

