



SURGICAL LIGHTS
ALVO **Vela**



Surgical lights

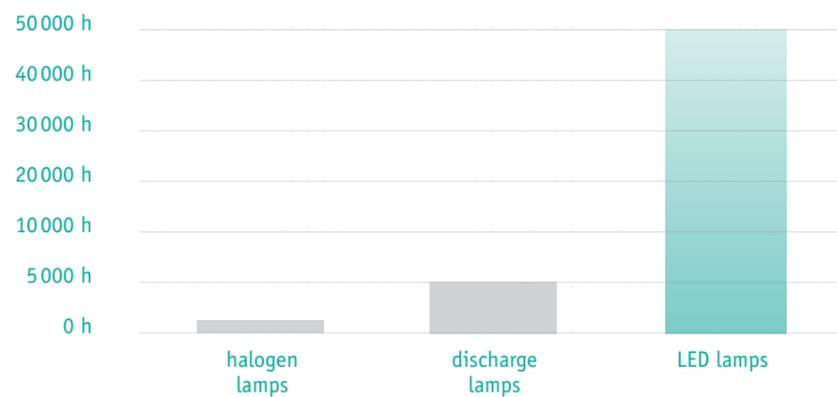
ALVO surgical and examination lights use LED diodes as light source. The high clinical value of the product has been achieved by reasonable technical parameters, low radiation temperature and long working time. The LED technology is an environment-friendly, future-proof solution. One of its main advantages is low energy consumption, which is a measurable economic benefit.

LED TECHNOLOGY

Sources of light in LED technology have several times longer lifetime in comparison to traditional light sources. It directly contributes to the reduction of waste. In addition, it does not contain lead, mercury and other hazardous substances which will facilitate their future disposal.

LED technology produces no harmful UV rays.

Lifetime of LED lights



The LEDs used in the ALVO surgical and examination lights (ALVO Vela 6-01 and ALVO Vela 6-02) are characterized by very long lifetime, estimated at more than 50,000 h. Compared to other light sources used in halogen or discharge lights, it is a respectively 50 or 10 times longer period between exchange of light sources. It importantly minimizes service interventions. Additionally, low energy consumption of LED lights: 2-3 times lower than at traditional surgical lights, is environmental friendly and reduces maintenance costs.



Surgical light ALVO Vela 6-01

The product is marked

The surgical light ALVO Vela 6-01 ensures consistent light distribution and its high intensity. The suspension and little weight of the light's head as well as comfortable handles enable easy set up and positioning of the surgical light.

The surgical light ALVO Vela 6-01 is offered in the following suspension configurations:

- ceiling suspension – single, double, triple, quatro
- wall suspension
- mobile basis



Ergonomic shape of the light's head minimizes disruption of the laminar airflow in the sterile area, whilst its low weight enables comfortable and stable positioning.



Non-sterile handles enable easy light positioning for the medical staff. Handles are made of powder-coated antimicrobial surface which includes silver ions, for increased safety.



Waterproof, resistant to environmental factors design ensures ease of disinfection and maintenance.



The **ENDO mode** is achieved with 4 LED diodes in green colour, with light intensity regulation.



The **LCD touch screen** for comfortable control of the light, enabling the following settings: light intensity, operating field dimension, light temperature, ENDO mode, and HD camera functions.



Sterile control handle enables precise positioning of the light. Autoclavable. The adjustment of the light field diameter can be added as option.

Color temperature adjustment

Wide range of color temperature adjustment enables changing the contrast of the observed tissue and reduces fatigue of the operator.



3700 K



4200 K



5000 K



Light intensity adjustment system provides constant light field distribution in the whole range of intensity control.

Light field diameter adjustment maintaining a constant level of light intensity over the entire range of adjustments.



OR MANAGEMENT OPTIONS

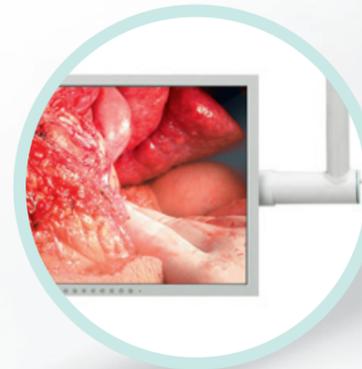
Functions of the surgical light ALVO Vela 6-01 can alternatively be controlled using the OR management solution ALVO Integra. It makes ALVO Vela surgical light 6-01 a future-proof solution, helping medical facilities expand with their needs.

Modern operating rooms are often controlled via central touch screen placed in the modular wall panel. It gives the surgical teams even greater comfort of cooperation during surgeries. With ALVO Integra solution clinicians can have surgical lights controlled remotely, with no interference in the sterile area.

Integrating ALVO Vela with OR management solution (ALVO Integra) may increase OR efficiency, but it is also a relevant auxiliary control feature.



Additional equipment surgical light ALVO Vela 6-01



Monitors – surgical displays can be mounted on additional arm of the surgical light set.



The surgical light ALVO Vela 6-01 can be optionally equipped with an HD camera, in order to record the course of surgery. With ALVO Integra Advanced solution, clinical images can easily be routed within the operating room displays or live-streamed to the auditorium outside, if demanded.

MULTIPLE CONFIGURATIONS

Ceiling suspension, SINGLE

- single arm, rotates nx360°

Ceiling suspension, DUO

- double arms, rotates nx360°

Ceiling suspension, DUO

- one arm with camera rotates nx360°
- second arm with monitor rotates n330°

Ceiling suspension, TRIO

- two arms, with the light heads rotates nx360°
- third arm with monitor rotates n330°

Ceiling suspension, QUATTRO

- two arms, with the light heads rotates nx360°
- two arms with monitors rotates n330°

Mobile basis

- single arm, rotates nx360°

Wall suspension

- single arm, rotates nx360°

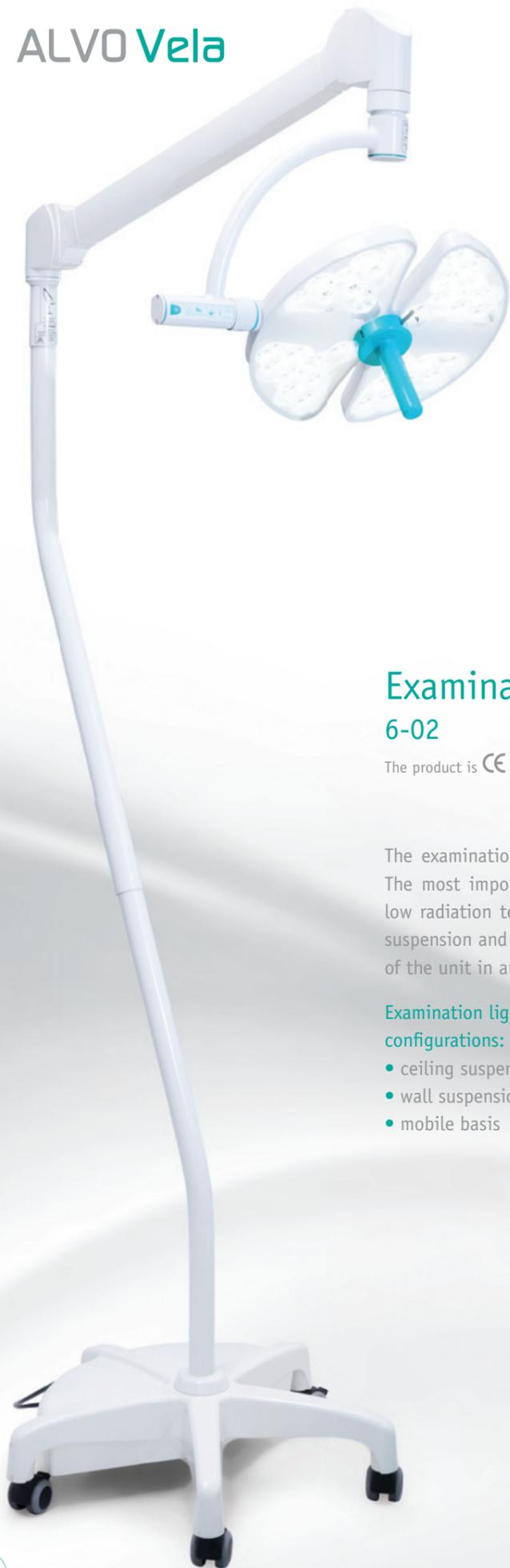
TECHNICAL PARAMETERS

	ALVO Vela 6-01-160	ALVO Vela 6-01-130
Light intensity Ec	160 000 lx*	130 000 lx*
Adjustment of light intensity	5-100%	5-100%
Colour temperature Tc (lamps with set colour temperature)	4300 K (4800 K)*	4300 K (4800 K)*
Colour temperature Tc (lamps with adjustable colour temperature)	3800-4800K (3700 - 5000K)*	3800-4800K (3700 - 5000K)*
Light field diameter d10 at Ec	220 mm (220-340 mm)*	220 mm (220-340 mm)*
Working range without refocusing	700-1400 mm	700-1400 mm
Depth of illumination l1+l2 (20%)	1100 mm	1100 mm
Depth of illumination l1+l2 (60%)	600 mm	600 mm
Colour rendering index [Ra (1-8)]	95 (97*)	95 (97)*
Red colour rendering index [R9]	93*	93*
Integrated system of Endo lighting	green light	green light
Number of LED's in light head	88	88
Temperature of lamp's cover after 60 min	40°C	40°C
Increase of temperature near doctor's head	<1°C	<1°C
Power supply	90-250V AC	90-250V AC
Power consumption (±10%)	70 - 110 W**	60 - 100 W**
Luminaire heads voltage	24-28V DC	24-28V DC
Life cycle of the lights	>50 000 h	>50 000 h

* additional versions
** depending on the version

We reserve the right to adjust technical parameters to specific market needs, provided that it will not affect safety and regulation standards.

We reserve the right to modify design, construction and dimensions of our products, in order to improve their functionality and comfort of use.



Examination light ALVO Vela 6-02

The product is  marked

The examination light ALVO Vela 6-02 uses LED diodes as light source. The most important features are good, persistent technical parameters, low radiation temperature, long and consistent light distribution. Stable suspension and low weight of the light enable easy set up and positioning of the unit in ambulatory conditions. Sterile handle available.

Examination light ALVO Vela 6-02 is offered in the following suspension configurations:

- ceiling suspension – single and double
- wall suspension
- mobile basis



Ergonomic shape of the light's head cover and minimal weight of the unit enable easy and stable positioning.



Waterproof, resistant to environmental factors design and non-porous hygienic surfaces facilitate disinfection and maintenance.



The **control panel** for basic functions including light intensity adjustment.



Sterile control handle enables precise positioning of the light and can be sterilized in an autoclave.



Mobile base (option) equipped with batteries allows the use of Alvo Vela 6-02 in any environment.

CONFIGURATION OPTIONS

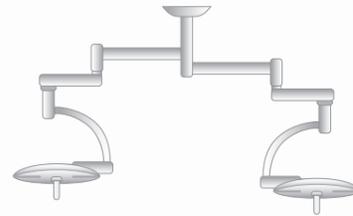
Ceiling suspension, SINGLE

- single arm, rotates nx360°



Ceiling suspension, DUO

- double arms, rotate nx360°



Mobile basis

- single arm, rotates nx360°



Wall suspension

- single arm, rotates nx360°



TECHNICAL PARAMETERS

ALVO Vela 6-02-050

Light intensity Ec	50 000 lx (60 000 lx)*
Adjustment of light intensity	5–100%
Colour temperature Tc	4300 K (4800 K)*
Light field diameter d10 at Ec	240 mm
Colour rendering index [Ra (1-8)]	93 (95)*
Number of LED's in light head	36
Temperature of lamp cover after 60 min	40°C
Increase of temperature near doctor's head	<1°C
Power supply	90–250 V AC
Power consumption	25-60 W**
Luminaire heads voltage	24-28 V DC
Life cycle of the lights	>50 000 h
Rotates	360°

* additional versions

** depending on the version

We reserve the right to adjust technical parameters to specific market needs, provided that it will not affect safety and regulation standards.

We reserve the right to modify design, construction and dimensions of our products, in order to improve their functionality and comfort of use.



ALVO Sp. z o.o. Sp.k.
ul. Południowa 21a
64-030 Śmigiel, Poland
tel. +48 65 518 98 49
fax +48 65 518 98 56
www.alvo.pl

