RevoLix jr.

Your Table top surgical Thulium laser

Applications

ENT
Pneumology
Neurosurgery*
Gynaecology
Gastroenterology
Urology
Visceral Surgery
Laparoscopy

LISALaser PRODUCTS
An OmniGuide Company

RevoLix jr. – powerful thulium laser in compact design

This compact table top surgical laser is available for soft tissue surgery and unifies all advantageous properties of existing laser principles in a single easy transportable unit:

RevoLix jr. offers the cutting and ablation properties like the well known CO_2 laser from a flexible fibre - no need for an articulated mirror arm or hollow waveguide.

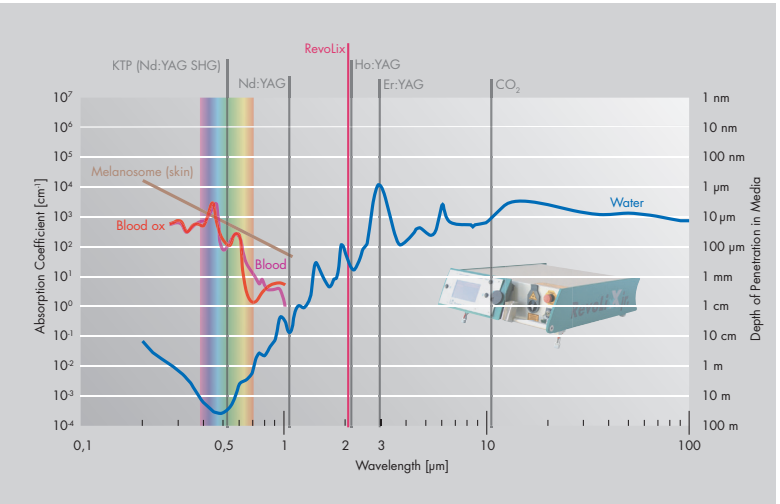
RevoLix jr. laser radiation achieves excellent haemostasis like Nd:YAG and diode lasers – without the risk of deep tissue penetration.

RevoLix jr. tissue effect is shallow like the Holmium laser – however there is no trauma. Cutting edges are smooth and clean. In open surgery there is no splattering.

RevoLix jr. laser radiation is delivered to the surgical site by flexible fibres – ideal for endoscopic, laparoscopic and minimally invasive surgery.

RevoLix jr. – why Two Micron?

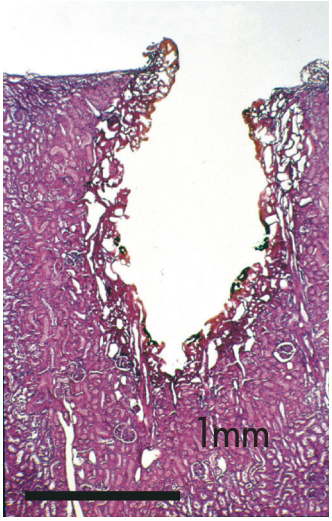
The ***RevoLix jr.*** wavelength at 2.0 micron is almost identical to the well established Holmium laser. This wavelength is known for its suitability for resection and ablation, safe application in an aqueous medium and it generates excellent haemostasis. These excellent properties are due to the efficient absorption of 2.0 micron laser radiation by water which is ubiquitous in any tissue. At the ***RevoLix jr.*** wavelength of 2.0 micron the absorption is 2.5 times stronger than at the Holmium wavelength providing even more precise cutting in soft tissue surgery.



RevoLix jr. – why Two Micron cw laser?

In soft tissue surgery efficient and even cutting combined with strong haemostasis is required. This is provided by the ***RevoLix jr.*** laser in an unmatched manner. The new ***RevoLix jr.*** laser operates in a continuous wave mode and cuts and vaporizes circulated and white tissue without deep penetration or uncontrolled necrosis. Clean cuts and excellent haemostasis are achieved by moving the beam across the surgical site. Generous Two Micron laser power capacity allows high vaporization and resection rates at no bleeding and short theatre time.

What are the advantages?



Cutting efficiency of soft tissue and haemostasis is superior to any known alternative. Tissue effect is restricted to less than 1 millimetre beneath the cut. ***RevoLix jr.*** preserves excellent vision to the surgical site. There is no vision impairment due to bleeding, excessive bubble formation, tissue fragments or ruptured tissue. Unlike visible lasers (KTP, LBO and some diode wavelengths) the surgical site is free of visible glare. The colour neutral laser safety eyewear does not generate discolouration like KTP. Endoscope lenses remain free from splatter when used in open surgery or in laparoscopy.

RevoLix jr. – why is it safe?

In an aqueous medium the laser effect to tissue is restricted to less than 2 millimetres in front of the tip of the fibre. Any tissue further away is shielded of by the medium. The same mechanism is protecting tissue and organs adjacent to the cut. Any tissue more distant than 2 millimeters beneath the cut is unaffected by the ***RevoLix jr.*** laser. Opposed to KTP, LBO, Nd:YAG and diode lasers this property eliminates the risk of unintentional tissue damage during laser surgery.

What are the applications?

The ***RevoLix jr.*** laser system has demonstrated its superior performance in surgical disciplines such as ENT, Pneumology, Neurosurgery*, Gynaecology, Gastroenterology, Urology, Visceral Surgery and Laparoscopy.

RevoLix jr. – delivery systems

LISA offers a wide range of specialised delivery systems. Please refer to the ***Surgical Laser Accessories*** and to the ***Surgical Laser Fibres*** brochure.

All fibres match with the surgical instrumentation recommended and approved by LISA laser products.

How does *RevoLix jr.* match with your theatre ?

The new laser is extremely theatre friendly ***RevoLix jr.*** does not cause noise strain to theatre personnel. The table top laser fits into any video tower. A laser trolley is available on option. Regular theatre utilities are sufficient (standard power outlet 100 - 240 VAC, no cooling water required). The laser has proven its extreme sturdiness during routine transportation between theatres and other departments.

RevoLix jr. – operation of the laser

The new laser is easy and safe to operate. The display is easy to understand. Operational modes such as continuous or chopped are selected by push buttons. The power setting is adjusted with a large adjustment wheel. Large characters display the settings on the easy to read display.

The laser is activated by the low profile ***Kix*** footswitch.

Kix footswitch
Order No. 101 660 043

Urology

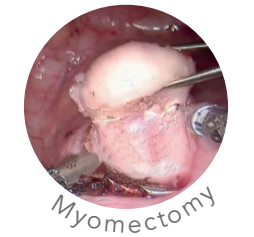
Vaporisation and excision of tumours
UUT-TCC, UTUC
Bladder neck incision
Opening of strictures
Partial nephrectomy
Laparoscopy


Excision of Bladder tumour

Haemorrhoids

Gynaecology

Excision of polyps
Endometriosis
Hysterectomy
Adhesiolysis
Conisation
Condylomata
Myomectomy


Myomectomy

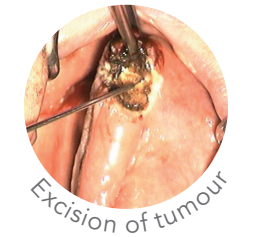
Neurosurgery*

Fenestration of cysts
Ventriculocysternosomy
Catheter recovery
3rd ventriculostomy
Tumour resection
Haemostasis


Ventriculostomy

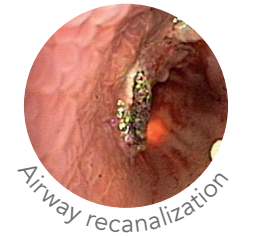
ENT

Excision of tumours
Excision of granulomas
Tonsillectomy
UVPP


Excision of tumour

Pneumology

Bronchoscopy
Airway recanalization
Desobstruction
Tissue coagulation


Airway recanalization

General Surgery


Oropharynxtumor

Technical Specifications

	RevoLiX jr.	RevoLiX jr. 30
Laser system	continuous wave DPSS laser	continuous wave DPSS laser
Wavelength	2013 nm	2013 nm
Power at fibre tip	1 - 15 Watt cw (adjustable)	1 - 30 Watt cw (adjustable)
Chopped mode	50 - 1000 ms	50 - 1000 ms
Frequency	0.5 - 10 Hz	0.5 - 10 Hz
Beam delivery	wide range of fibres	wide range of fibres
Aiming beam	635 nm (red) or 532 nm, (green) max. 1.3 mW (adjustable), laser class 3R	
Mains supply	100 - 240 VAC 50/60 Hz, 6 A max.	100 - 240 VAC 50/60 Hz, 6 A max.
Cooling system	Air cooling	Air cooling
Dimensions	H 160 x W 460 x L 630 mm	H 160 x W 460 x L 630 mm
Weight	20 kg	20 kg
Environmental conditions	15 - 28 °C / 10 - 90 % humidity (non-condensing)	

Safety Standards: IEC 60601

CE acc. Council Directive 93/42/EEC

U.S. federal law restricts this device to sale by or on the order of a physician.

Laser Trolley
Optional laser trolley

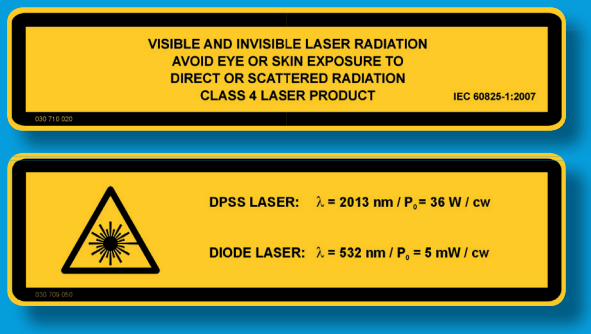
IMPORTANT NOTICE:

The information provided is a general overview of potential clinical applications of the described products. National health care regulations vary between countries and may exclude certain clinical applications at your location. The user assumes responsibility to be updated about national deviations from the applications listed above.

* In the USA the products are not intended for use in clinical applications in neurosurgery.

U.S. federal law restricts these devices to sale by or on the order of a physician

Specifications are subject to change without notice.
Made in Germany 2019 - 02
Brochure Order no. 036 004 110



LISA Laser Products GmbH
Albert-Einstein-Str. 4
37191 Katlenburg-Lindau
Germany
fon: +49 5556 9938-0
fax: +49 5556 9938-10
info@lisalaser.de www.lisalaser.de

LISA Laser PRODUCTS
An OmniGuide Company