

The innovative laser system for minimally invasive surgery.

# Auriga<sup>®</sup>



Lynton<sub>surgical</sub>

The innovative laser system for minimally invasive surgery

# Auriga®

For an innovative, yet reliable, answer to your current and future surgical laser needs, look no further than the Auriga® family of surgical laser systems. Combining pioneering technology with a mature and well-established Holmium:YAG laser platform, the Auriga® surgical laser systems allow you, the surgeon, to concentrate on the more important aspects of a procedure - the needs of the patient.

## A Trusted Technology with New Advances

The Auriga® and the Auriga®XL Holmium:YAG Laser Systems, manufactured in Germany by StarMedTec GmbH, are members of a family of surgical laser systems that combine state-of-the-art laser design innovations with a mature and reliable Holmium:YAG laser platform. Holmium:YAG has long been recognised as the Gold Standard system for laser lithotripsy of urinary and biliary calculi, but innovations in resonator design, dynamic water-cooling and microprocessor control at StarMedTec GmbH have allowed the capabilities of the Holmium:YAG laser to be extended to higher powers, whilst still maintaining the superior beam quality at tissue that can only be provided by a single



operational laser head. Thus, the applications of the 50W Auriga®XL system, in addition to lithotripsy and the other lower power applications, have been extended to include vapourisation techniques such as Holmium Laser Ablation of the Prostate (HoLAP), where power is important, and Holmium Laser Enucleation of the Prostate (HoLEP), where now both power AND superior beam quality are important. It is the superior beam quality of the Auriga®XL system, translating into a superior cutting efficiency, that allows it to outperform systems with twice the power when carrying out HoLEP procedures.

## Operating at 2.1µm

The technology of the Auriga® and Auriga®XL Surgical Holmium:YAG Laser Systems utilizes the high tissue/water absorption in the 2µm

region of the electromagnetic spectrum to achieve efficient cutting at the same time as an acceptable level of coagulation. Of the other laser systems currently available, only Thulium at 1.9µm or 2.01µm, Erbium:YAG at ~3µm and Carbon Dioxide (CO<sub>2</sub>) at 10.6µm have stronger absorption in tissue/water. Of these systems, however, only the Thulium lasers (such as the vela® and vela®XL Systems from StarMedTec) have wavelengths that can be delivered, like the 2.1µm output from the Auriga® systems, through standard flexible optical fibres. In addition to this, however, the Auriga® and the Auriga®XL Holmium:YAG Laser Systems are both pulsed systems, which is what allows them to be used for lithotripsy *in addition* to the coagulation, vapourisation and enucleation/resection techniques accessible to continuous wave (CW) laser systems - and where all this can be carried out using minimally invasive or "keyhole" surgery techniques thanks to the fibre delivery.

## Auriga®

The 30W Auriga® laser system is a high performance medium-power holmium laser. Its characteristics make it the ideal choice for open or minimally invasive access urology, orthopaedics, gastroenterology and general surgical procedures. The various applications are covered by dedicated fibres or specialised handpieces. You can expect safe and easy handling when operating with rigid or flexible endoscopes. Unique feature: Auriga® can be programmed for lithotripsy, ablation and coagulation, which allows a greater than ever range of applications while still being easy to operate.

In lithotripsy of urinary and biliary calculi, endoscopy with the Auriga® laser system ensures minimally invasive and thus patient-friendly procedures. Even those hard-to-reach regions can be treated successfully thanks to the flexibility of small-diameter fibres. Benefit: The high-power pulses ensure extremely efficient disintegration of any stone irrespective of its composition. Since

this treatment modality has gained rapid acceptance, it has become one of the most common laser procedures worldwide.

The benefits of the 30W Auriga® laser system include the following:

- Optimized programs for:
  - lithotripsy (any type of stone)
  - ablation (hard or soft tissue)
  - coagulation
  - LITT
- High power shortens treatment times.
- Dedicated fibres for different applications (including a range of standard end-fire fibres in either single-use or reusable versions).
- User-friendly handling with easy-to-use interface (the treatment programmes and application parameters are set easily and rapidly via the LCD display).
- Application-related menu.
- Compact and light-weight design allows ease of transport and setup in theatre.
- Highly visible green aiming beam.
- Standard power supply (230V/16A).
- Immediately ready to use under normal operating theatre conditions.



## Auriga®XL

The high-power Auriga®XL laser system delivers 50W to tissue. Together with the optimized application parameters and the superior beam quality, this power allows the Auriga®XL to outperform systems with nominally higher output powers. The Auriga®XL is a truly universal system, with applications not only in lithotripsy but also in tissue vaporisation, e.g., ablation of the prostate (HoLAP) and, especially, for Holmium Laser Enucleation of the Prostate (HoLEP).

The additional benefits of the 50W Auriga®XL laser system include the following:

- High-power holmium laser with the same standard power supply (230V/16A).
- Shorter operating times due to higher power output.
- Efficient removal of larger tissue volumes.
- High Frequency “Stone Dusting”
- Superior efficiency in HoLAP
- Ideal system for HoLEP

#### NICE Guidelines



The recently published (May 2010) NICE Guidelines on Lower Urinary Tract Symptoms (LUTS) recommend HoLEP as the only laser-based surgical treatment for managing voiding LUTS presumed secondary to BPE. More specifically, the guidelines go on to state that the hitherto popular laser vaporisation techniques should now only be used as part of a randomised controlled trial that compares these techniques with TURP. These recommendations effectively mean that the 50W Auriga®XL laser system is now the ideal surgical laser system for HoLEP.



For more information, or to book a demonstration, go to [www.lyntonsurgical.co.uk](http://www.lyntonsurgical.co.uk) or contact Lynton Surgical on 0845 612 1545

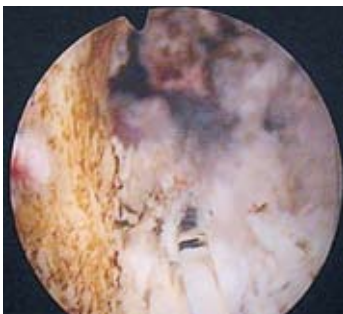
## APPLICATION SUMMARY

### 30W Auriga®

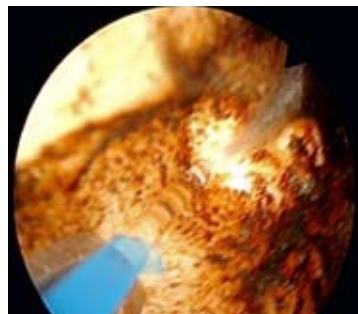
- Lithotripsy of Renal and Ureteral Calculi.
- Vaporisation of Neoplasms and Tumours.
- Incision/Resection of Strictures.
- Bladder Neck Incisions.
- Resection/Coagulation of Condylomata.

### 50W Auriga®XL

- Lithotripsy of Renal and Ureteral Calculi (including high frequency "Stone Dusting").
- Vaporisation of Neoplasms and Tumours.
- Incision/Resection of Strictures.
- Bladder Neck Incisions.
- Resection or larger volumes, including Tumours and Condylomata.
- **Enucleation of the Prostate (HoLEP).**
- Ablation of the Prostate (HoLAP).



CONDYLOMATA



ENUCLEATION OF THE PROSTATE (HoLEP)



LITHOTRIPSY



MISC SURGERY

*"We develop high-quality, but affordable laser systems which are extremely effective and can be used for many different applications."*

Dr. Werner Falkenstein  
MD, StarMedTech GmbH

*"If offering surgery for managing voiding LUTS presumed secondary to BPE, offer monopolar or bipolar transurethral resection of the prostate (TURP), monopolar transurethral vaporisation of the prostate (TUVP) or holmium laser enucleation of the prostate (HoLEP). Perform HoLEP at a centre specialising in the technique, or with mentorship arrangements in place."*

NICE clinical guideline 97 – Lower urinary tract symptoms

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## ABOUT STARMEDTEC



StarMedTec GmbH is a young, dynamic company that develops cutting edge medical laser systems for surgical applications - especially in the field of urology. Skilled staff with many years of experience in the medical laser business are the basis of an outstanding expertise in the development, production, servicing and marketing of these new products. In the area of laser urology StarMedTec is already one of the top ten providers worldwide.

With 30 years of experience in the field of laser physics, 20 of those in the area of medical laser applications, Managing Director Dr. Werner Falkenstein can be considered one of the experts in this industry. He and the key members of the StarMedTec management team have also worked together for more than 10 years; initially in the "Medical Laser" business unit of Carl Baasel Lasertechnik GmbH, Starnberg, then in the

"Surgery Division" at Wavelight AG, Erlangen. In the last 7 years more than 850 Auriga® Holmium Lasers have been sold throughout the world. This success encouraged Division Manager, Dr. Falkenstein, to lead a management buy-out at the end of July 2006 and form the new company of "StarMedTec GmbH" (based on the Starnberg location - Starnberger Medizintechnik). Supported by the experienced and committed team of employees the activities were rapidly expanded and new, cutting-edge laser systems, such as the vela® & vela®XL Thulium Lasers, have now been added to the successful Auriga® product range.

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## ABOUT LYNTON SURGICAL

Based in Holmes Chapel, Cheshire, The Lynton Group (more generally known as Lynton Lasers Ltd) has been supplying the medical and aesthetic laser industry for over 16 years. Lynton Surgical is a recently formed division of the company specifically created to address the needs of those customers in NHS and Private Hospitals requiring surgical lasers and their associated accessories & consumables.

The Lynton Group has always recognised the importance of after-sales support, building its name on the ongoing customer services

that it provides. A 6-strong team of fully-trained UK-based service engineers (plus administrative support) is available to ensure that a customer's system is always ready and always performs to its full specification. The availability of such a team also allows Lynton Surgical to supply systems on long or short term rentals as an optional alternative to standard purchase options.



**INVESTORS  
IN PEOPLE**



## SYSTEM SPECIFICATIONS

### Auriga®

WAVELENGTH	2080nm
MAXIMUM OUTPUT POWER	30W
MAXIMUM PULSE ENERGY	3J
MAXIMUM PULSE FREQUENCY	20Hz
BEAM DELIVERY	Optical Fibre
PILOT BEAM	532nm <1mW
USER INTERFACE	Soft Touch Keyboard with LCD Display
COOLING	Integrated Water Cooling System with Water-to-Air Heat Exchanger
MAINS CONNECTION	230Vac ±10% @ 50Hz/60Hz 16A (max. 3.5kW)
DIMENSIONS	84cm x 35cm x 104cm (L/W/H)
WEIGHT	74kg (approx) Cooling water adds ~4kg
ELECTRICAL PROTECTION	Protection Class 1 Protection Type IP20
APPLICATION PART	Type B
STANDARDS	EN/IEC 60601-1 CE 1275 Labelling Medical product Class IIb (Rule 9) according to MDD 93/42/EEC Laser Class 4 (EN / IEC 60825-1)
LASER CLASSIFICATION	



## SYSTEM SPECIFICATIONS

### Auriga®XL

WAVELENGTH	2080nm
MAXIMUM OUTPUT POWER	50W
MAXIMUM PULSE ENERGY	4.2J
MAXIMUM PULSE FREQUENCY	25Hz
BEAM DELIVERY	Optical Fibre
PILOT BEAM	532nm <1mW
USER INTERFACE	Soft Touch Keyboard with LCD Display
COOLING	Integrated Water Cooling System with Water-to-Air Heat
MAINS CONNECTION	230Vac ±10% @ 50Hz/60Hz 16A (max. 3.5kW)
DIMENSIONS	84cm x 35cm x 104cm (L/W/H)
WEIGHT	75kg (approx) Cooling water adds ~5kg
ELECTRICAL PROTECTION	Protection Class 1 Protection Type IP20
APPLICATION PART	Type B
STANDARDS	EN/IEC 60601-1 CE 1275 Labelling Medical product Class IIb (Rule 9) according to MDD 93/42/EEC Laser Class 4 (EN / IEC 60825-1)
LASER CLASSIFICATION	



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# Lynton surgical