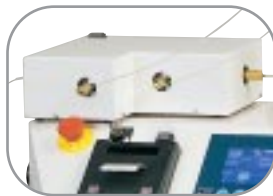


# Smart 1064

Nd:YAG Laser technology for surgery



Beam Splitter

## TECHNICAL DATA

Type of laser	Nd:YAG
Wavelength	1064 nm (DW 1320 nm)
Power	60-100W
Emission	Continuous emission/Single pulse/Self-repeating
Data Base	10 programmable settings
Beam Splitter	pre-set
Laser beam guide	HeNe 5 mW @ 632.8 nm
Fibre connector	SMA 905
Cooling	Integrated air/water
Power supply	230 Vac/22-28 A (max)/50 - 60 Hz
Electronic control	Microprocessor
Control panel	LCD
Printer	included
Dimensions and weight	104 cm (H), 42 cm (W), 62 cm (D); 105 Kg

## TECHNICAL DATA

Beam Splitter:	Power splitter 1 in 4 out
	Outputs of up to 7W per fibre
	Fibre absorber
	Remote controlled fibre connection

## MAIN APPLICATIONS

- GASTROENTEROLOGY
- BRONCHOLOGY
- ORL
- GENERAL SURGERY
- NEUROSURGERY
- ENDOCRINOLOGY
- INTERVENTIONAL RADIOLOGY



CE  
0459

VISIBLE AND INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
CLASS 4 LASER PRODUCT  
Max. Nd:YAG laser energy @ 1064 nm: 100W  
Max. HeNe pilot laser power @ 632.8nm: 15mW  
Classified by EN 60825-1:2007-08

# Smart 1064



www.dekalaser.com



Nd:YAG Laser technology  
for surgery

## DEKA THE SCIENCE OF WELL-BEING

Deka is the medical division of the El.En.Group, Italian leader in the production of laser equipment. Founded in 1981 it operates in more than 40 countries throughout the world. The Group's activity covers the majority of industrial applications and laser sources with powers up to 6 kW. Deka produces laser equipment in compliance with the specifications of Medical Device Directive 93/42/EEC and adopts a quality assurance system certified by according to the ISO 9001 and ISO 13485 standards.



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Smartlaserline

## ASSISTED ENDOSCOPY WITH Nd:YAG LASER

Whereas traditional surgery has come up against operating obstacles and poor patient compliance, the Nd:YAG technology has allowed for perfecting mini-invasive endoscopic methods for ensuring extremely reliable treatment of various pathologies with a considerable social impact. For some time now, operators in numerous endoscopic branches have chosen to use the laser system as a precise instrument with a high tolerance level, enabling operation on a blood-free field.

The use of these methods also allows for reducing the post-op times and represents a valid backup in cutting down running costs in all hospital structures. Moreover, the adaptability and flexibility allows for multidisciplinary use for exploiting the technological investment to the utmost.

## SMART 1064 AND 1064 DW

DEKA's family of Nd:YAG lasers is growing:  
**Smart 1064** with maximum continuous intensities of either 60W or 100W with one single wavelength (1064 nm); a valid ally in all mini-invasive surgical techniques.  
**Smart 1064 DW** with double wavelengths (1064 nm and 1320 nm) offering increased coagulative and ablative capacities. The systems are entirely stand-alone without any external water connections.



Optical fibres  
from 200 µm to 1000 µm

### Bibliography:

**THYROID TISSUE: US-guided Percutaneous Interstitial Laser Ablation-A Feasibility Study**  
 (Radiology 2000; 217:673-677)  
 C. M. Pacella, G. Bizzarri, R. Guglielmi, V. Anelli, A. Bianchini, A. Crescenzi, S. Pacella, E. Papini

**HEPATOCELLULAR CARCINOMA: Long-term Results of Combined Treatment with Laser Thermal Ablation and Transcatheter Arterial Chemoembolization**  
 (Radiology 2001; 219:669-678)  
 C. M. Pacella, G. Bizzarri, P. Cecconi, B. Caspani, F. Magnolfi, A. Bianchini, V. Anelli, S. Pacella, Z. Rossi

**LASER THERMAL ABLATION IN THE TREATMENT OF SMALL HEPATOCELLULAR CARCINOMA: Results in 74 Patients**  
 (Radiology 2001; 221:712-720)  
 C. M. Pacella, G. Bizzarri, F. Magnolfi, P. Cecconi, B. Caspani, V. Anelli, A. Bianchini, D. Valle, S. Pacella, G. Manenti, Z. Rossi



## SMART 1064 BS

The **Smart 1064BS** model that comes with the **Beam Splitter** has developed and perfected an exclusive mini-invasive interstitial technique for treating neoplasias focalised in organs like the liver, thyroid, lungs and others. The possibility of repeating the treatment even after short time intervals enables custom-designing of the therapy in full respect of the patient's stadiation.



Beam Splitter

## BEAM SPLITTER

An exclusive multifibre diffusor, the **Beam Splitter** system represents a technological innovation that enables the simultaneous use of a series of optical fibres (from 1 to 4) from 200 to 300 microns, using small calibre introductory needles as an access point and for interstitial targeting. The effectiveness of this method allows for successfully reaching and ablating all neoplastic lesions, even those in difficult sites in close proximity to dangerous districts, thus guaranteeing safety margins overlapping those of resecting surgery.

### SMART 1064 BS OPTICAL FIBRES

200 micron fibre with flat tip straight	Neoplasias
300 micron fibre with flat tip straight	Neoplasias
600 micron fibre with cylindrical diffusion	Neoplasias

### SMART 1064-1064 DW OPTICAL FIBRES

400 micron fibre, not cooled	Meningiomas Condylomas Polyposis Diskopathies
600 micron fibre, not cooled	
550 micron fibre, not cooled	
600 micron fibre, cooled	
400 micron fibre with conical tip	
600 micron fibre with conical tip	
1000 micron fibre with conical tip	
600 micron fibre with spherical tip	
1000 micron fibre with spherical tip	

## HANDPIECES

Straight and curved
Handpiece 25 mm long
Handpiece 50 mm long
Handpiece 100 mm long

Smart 1064 BS