

# LEONARDO®

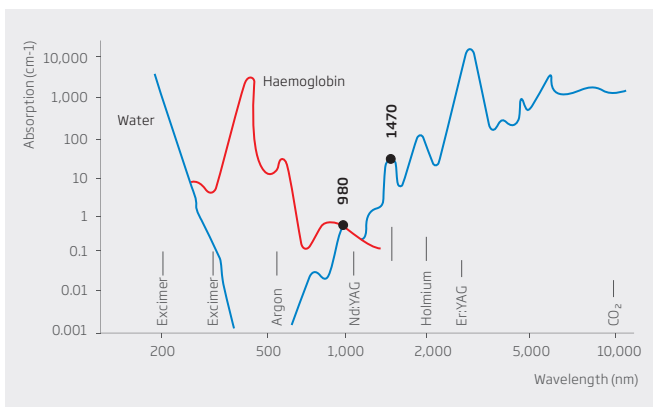


Model	LEONARDO® DUAL 200	LEONARDO® DUAL 45
REF	SL980+1470nm200W	SL980+1470nm45W
Wavelength	980 nm and 1470 nm	980 nm and 1470 nm
Max. power	200 Watt (1470 nm/40 Watt + 980 nm/160 Watt) individually adjustable	45 Watt (1470 nm/15 Watt + 980 nm/30 Watt), individually adjustable
Fiber diameter	≥ 360 µm	≥ 360 µm
Aiming beam	532 nm and 635 nm, green 1 mW, red 4 mW, user-defined intensity	532 nm and 635 nm, green 1 mW, red 4 mW, user-defined intensity
Treatment mode	CW, pulse mode, ELVeS® signal, ELVeS® segment, derma mode	CW, pulse mode, ELVeS® signal, ELVeS® segment, derma mode
Pulse duration /-break	0.01 – CW / 0.01 – 60 sec	0.01 – CW / 0.01 – 60 sec
Power supply	110 – 240 VAC, 50 / 60 Hz, 850 VA	110 – 240 VAC, 50 / 60 Hz, 450 VA
Dimensions (H×W×D)	approx. 20 cm × 37 cm × 26 cm	approx. 28 cm × 37 cm × 9 cm
Weight	approx. 15 kg	approx. 8.5 kg



Model	LEONARDO® Mini Dual	LEONARDO® Mini 1470 nm
REF	SL980+1470nm14W	SL1470nm8W
Power / Wavelength	10 W (980 nm) / 4 W (1470 nm)	8 W (1470 nm)
Fiber diameter	≥ 360 µm	≥ 360 µm
Aiming beam	635 nm, max. 4 mW	635 nm, max. 4 mW
Treatment mode	CW, pulse mode (optional)	CW, pulse mode (optional), ELVeS® signal
Pulse duration /-break	0.01 – 60 sec / 0.01 – 60 sec	0.01 – 60 sec / 0.01 – 60 sec
Power supply	110 – 240 VAC, 50 – 60 Hz ( 7.2 VDC @ 36 W)	110 – 240 VAC, 50 – 60 Hz ( 7.2 VDC @ 36 W)
Batteries	Li-ion Batteries	Li-ion Batteries
Dimensions (H × W × D)	6 cm × 9 cm × 21,5 cm	6 cm × 9 cm × 21,5 cm
Weight	900 g	900 g

All laser sets comprise 3 safety goggles, foot switch, interlock connector, power cord and manual in a carrying case. The LEONARDO® DUAL 45 Watt is only suitable for the treatment of vesical tumours, partial kidney resection and other low-grade applications with low wattage settings. The standard device in urology primarily used for BPH treatment and all other applications is the LEONARDO® DUAL 200 Watt. The LEONARDO® DUAL 45 is the suitable laser system for partial nephrectomy, bladder tumors, strictures, condylomas etc.. The LEONARDO® Mini is the suitable laser system for bladder tumors, strictures, condylomas, etc



## LEONARDO® DUAL 200 Watt - Unique combination of two simultaneous wavelengths

LEONARDO® DUAL 200 Watt combines the wavelengths of 980 nm and 1470 nm with high absorption in H<sub>2</sub>O and hemoglobin for multiple applications not only in urology. Wavelength of 980 nm provides high absorption in hemoglobin and is therefore well suited for applications in urology. Due to absorption properties the emitted laser beam does not affect the bladder.

**LEONARDO® DUAL 200**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 160 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 40 W (Max.)  
IEC 60825-1:2007 IEC 60601-2-22:2007

INVISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
Diode-Laser 532 +/- 10 nm CW 1 mW (Max.) (Aiming)  
IEC 60825-1:2007 IEC 60601-2-22:2007

**LEONARDO® DUAL 45**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 30 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 15 W (Max.)  
EN 60825-1:2008 EN 60601-2-22:2007

INVISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
Diode-Laser 532 +/- 10 nm CW 1 mW (Max.) (Aiming)  
EN 60825-1:2008 EN 60601-2-22:2007

**LEONARDO Mini Dual**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 30 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 4 W (Max.)  
IEC 60825-1:2007 IEC 60601-2-22:2007

INVISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
Diode-Laser 532 +/- 10 nm CW 1 mW (Max.) (Aiming)  
IEC 60825-1:2007 IEC 60601-2-22:2007

**LEONARDO Mini 1470 nm**

INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR INDIRECT RADIATION

**CLASS 4 LASER PRODUCT**  
Diode-Laser 1470 +/- 30 nm CW 8 W (Max.)  
IEC 60825-1:2007 IEC 60601-2-22:2007

INVISIBLE LASER RADIATION  
AVOID EYE EXPOSURE TO DIRECT RADIATION

**CLASS 3R LASER PRODUCT**  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.) (Aiming)  
Diode-Laser 532 +/- 10 nm CW 1 mW (Max.) (Aiming)  
IEC 60825-1:2007 IEC 60601-2-22:2007

 1984

 CeramOptec GmbH  
Siemensstr. 44, D-53121 Bonn