

# biolitec® Laser Systems

**LEONARDO® DUAL 100**

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

**CLASS 4 LASER PRODUCT**  
Diode-Laser 980 +/- 30 nm CW 85 W (Max.)  
Diode-Laser 1470 +/- 30 nm CW 15 W (Max.)  
EN 60825-1:2008 EN 60601-2-22:2007

VISIBLE 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


**Ceralas® HPD**

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

**CLASS 4 LASER PRODUCT**  
Diode-Laser 1350 +/- 30 nm CW 60 W (Max.)  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.)  
EN 60825-1:2007 EN 60601-2-22:1996

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

**CLASS 4 LASER PRODUCT**  
Diode-Laser 1350 +/- 30 nm CW 120 W (Max.)  
Diode-Laser 635 +/- 10 nm CW 4 mW (Max.)  
EN 60825-1:2007 EN 60601-2-22:1996



**CE** 1984

**CeramOptec GmbH**  
Siemensstr. 44, D-53121 Bonn

Model	LEONARDO® DUAL 100	LEONARDO® DUAL 45	Ceralas® HPD
REF	SL980+1470nm100W	SL980+1470nm45W	SH1350nm60W400u
Wavelength	980 nm and 1470 nm	980 nm and 1470 nm	1350 nm
Performance	max. 100 Watt (1470 nm / 15 Watt + 980 nm / 85 Watt), individually adaptable	max. 45 Watt (1470 nm / 15 Watt + 980 nm / 30 Watt), individually adaptable	60 Watt
Fiber diameter	≥ 360 µm	≥ 360 µm	≥ 400 µm
Laser class	4	4	4
Target 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	635 nm +/- 30 nm; PWM 4 mW (max.)
Treatment mode	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode	CW, Pulse Mode, ELVeS® Signal, ELVeS® Segment, Derma Mode	CW, Pulse Mode
Impulse length/- pause	0.01 – 60 sec / 0.01 – 60 sec	0.01 – 60 sec / 0.01 – 60 sec	variabel 0.01 – 99.9 sec or continuously
Energy supply	110 – 240 VAC, 50/60 Hz, 600 VA	110 – 240 VAC, 50/60 Hz, 450 VA	100 – 240 VAC, 50/60 Hz, 400 VA
Cooling	–	–	Air cooled System
Measurements (H x W x D)	approx. 28 cm x 37 cm x 9 cm	approx. 28 cm x 37 cm x 9 cm	approx. 30 cm x 60 cm x 30 cm
Weight	approx. 8.5 kg	approx. 8.5 kg	approx. 30 kg

## Fibers

### Bare Fibers Flat Tip

REF	Product	Length [m]	Core ø [µm] / [Fr]	AD ø [µm] / [Fr]
503200745	Bare Fiber 600 µm, Flat Tip, Adj. Luer, ID (1 x 6 h)	3	565 / 1.7	860 / 2.6
503300415	Bare Fiber 1000 µm, Flat Tip, Adj. Luer, ID (1 x 6 h)	2.6	945 / 2.9	1400 / 4

### Gas Liquid Cooled Fibers

503200525	GLC 180 Gas-, Liquid Cooled fiber, ID (1 x 6 h)	3	565 / 1.7	1800 / 5.4
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## Handpieces and Instruments

501200985	Laser Focus Handpiece
500400370	Instrument for Thoracoscopy, with smoke suction adapter, for 600 – 1000 µm fibers
400100100	Universal Dual Luer Handpiece, for 600 – 1000 µm fibers

## Accessories

MP0003	Kartwagen Leonardo Laser
LA1371	Laser safety goggles DIR 804 – 1755 L3 (FULL), type: basket, clear
LA5165	Sticker Laser warning 20 x 20 cm
400100115	Medi Strip 0.7/1.2 BF 600 µm, autoclavable – Fiber stripper for BF 600 µm
400100120	Medi Strip 1.0/1.5 BF 1000 µm, autoclavable – Fiber stripper for BF 1000 µm
AB1908	Touhy Borst Adapter
AB2594	Biopsy needle 14 G, 6 cm with cm markings, sterile

## Flue Gas Exhaustion

MP0025	Smoke evacuation FUMOVAC 700 Complete unit 220/240 V 50/60 Hz / HM57525420
MP0026	Smoke evacuation filter for FUMOVAC 700 twin pack
MP0027	Tube set single use / holding device HP, 3m length, sterile / REF 57525332 / Packaging unit 10 pcs
MP0028	Laparoscopic Smoke Evacuation Tube, 3m length, sterile, REF 57525424 / PU.12 pcs
MP0019	ATMOS Air hose, ø 22 mm, L = 2.10 m, single use
MP0020	ATMOS Air hose, ø 22 mm, L = 2.10 m, reusable
MP0021	ATMOS Hose connector straight ø 22 mm to ø 10 mm

