

Laser therapy



How does Laser therapy work?

Laser therapy physiologically works due to photochemical and photobiological effects on the cells and on the under-skin tissue. The laser light, with its transparent wave length, has the property of going through the surface of the skin without any important action. Therefore, the therapy treatment is very much appreciated by the patient at all times, who never perceives any unpleasant sensations: laser therapy is painless, riskless and the time dedicated to each treatment is less than the one employed for other therapies. The devices propose some pre-set protocols with the recommendable fluence rate for each type of treatment. The operator is free to adjust the treatment time or the frequency, according to the area to be treated and the power of the handpiece in use, in order to convey the fluence rate necessary for the treatment. These devices are provided with secret access code and security key (Interlock), as established by law.

Effects of the Laser

- **Anti-inflammatory effect.**
- **Effects on the peripheral nervous system** (antalgic and regenerative effect).
- **Biostimulating effect**, with regeneration of tissue.
- **Effect on micro circulation and blood vessels:** the laser induces improvement of local micro circulation, which includes the relief of local spasms of the arteriolar and venular vessels (which occurs, for example, after trauma or inflammation), and brings about intensification of the blood flow in the nutritional capillaries.
- **Immunomodulating effect.**
- **Enzyme photo activation effect.**
- **Placebo effect.**

Indications for using lasers

- Rheumatology
- Orthopedics
- Dermatology
- Dentistry
- Otolaryngology
- Neurology
- Laser acupuncture

SMART CARD TECHNOLOGY - EXTERNAL MEMORY



EL0001 PERSONAL SMART CARD

The smart card memory can be used with the Excellent and Plus lines. It's possible to save customized treatments based on specific setting of parameters. These therapies can be used for a specific user or a group of patients affected by same pathology. Set of 10 pieces.

ACCESSORIES

2



EL0028 1 DIODE HANDPIECE - 25MW
EL0029 1 DIODE HANDPIECE - 50MW
EL0030 1 DIODE HANDPIECE - 100MW



EL0031 3 DIODE HANDPIECE - 75MW
EL0032 3 DIODE HANDPIECE - 150MW
EL0033 3 DIODE HANDPIECE - 300MW



EL0034 5 DIODE HANDPIECE - 125MW
EL0035 5 DIODE HANDPIECE - 250MW
EL0036 5 DIODE HANDPIECE - 500MW



EL0037 8 DIODE HANDPIECE - 200MW
EL0038 8 DIODE HANDPIECE - 400MW
EL0039 8 DIODE HANDPIECE - 800MW



1-diode handpiece



3-diode handpiece



5- or 8-diode handpiece



EL0042

EL0040 LASER ARM
 Arm for 1 diode handpiece with possibility of fixing to trolley. (cod. EL12003).

EL0041 LASER ARM
 Arm for 3-5-8 diodes handpieces with possibility of fixing to trolley. (cod. EL12003).

EL0042 L1 ARM
 Pantograph arm for 1 diode handpiece. Free fixing.

EL0043 L3-5-8 ARM
 Pantograph arm for 3-5-8 diodes handpieces. Free fixing.



EL12003 TROLLEY
 Trolley with tabletop and possibility of fixing non wheeled electromedical equipment and the arms.



EL0016 CARRY CASE
 Universal carry case for transport of portable unit.



02098 LASER PROTECTIVE GOGGLES
 Lens color green, VLT 45%.

Laser Therapy handpieces overview

Twelve different handpieces are available. They are interchangeable and their difference is based on the number of diodes (1-8). The nominal power transmitted by each diode (25mW – 100mW) is up to a maximum of 800 mW for an area of up to 5 cm². Each handpiece not only has the afore mentioned diodes for therapy emissions (905nm), they also guarantee a perfect pointing of the therapy by the presence of a guiding light generated by other two pointing diodes which generate a visible red light.

The laser handpieces have the possibility of automatic emission to approach the part to be treated or a continuous mode. In this case a support arm may be a useful accessory.

Low Level Laser therapy

EL12061 FISIOLASER IRD

Laser therapy equipment with 1 output.
Automatic treatment time setting according to the energy to be provided and the area selected.
Smart card included. Laser wavelength 905 nm.



TECHNICAL FEATURES

Mains voltage:	230 Vac, 50-60Hz, ±10%	
	115 Vac, 50-60Hz, ±10% on request	
Max. Power absorption:	15 VA	
Interlock socket/Safety key:	3 contact DIN socket	
Backlit LCD Display:	graphic b/w 320 x 240 pixel	
Programmable treatment time:	up to 99 minutes	
Diode Laser wave length emission:	905 nm	
Laser classification EN 60825-1:	3B	
Device class 93/42/CEE directive:	II B	
Electrical insulation UNI EN 60601-1:	I / BF	
Degree of protection by the liquid access UNI EN 60601-1:	IPX0	
Programmable pulse frequency:	(200-10.000) Hz	
Pulse duration:	100 nsec	
	25 W	
Peak power for single diode:	50 W	
	100 W	
	500 W	
TARGET POINTING DEVICE CHARACTERISTICS:		
Target pointing device characteristics:	Target pointing device UNI EN 60601-2-22	2 light-drive
	Light-drive device	Led-diode
	Light-drive color	Red
	Light-drive representation on the impact point	Spot with red as colour
	Laser-beam positioning:	Always to the centre of the simmetry axis of 2 red spots
Typology for emission of the treatment:		Manual emission
		Automatic emission
		Continuous emission
Output channels:	1	
Stored protocols:	79	
Storable protocols:	50	
External size:	39x13x32 (probe holders excluded)	
Weight:	4.30 Kg	

Standard Accessories

	Q.TY
Mains power supply cable	1
Fuses	2
Manual of therapies	1
MLA1 Laser probe 25mW	1
Safety laser goggles	2
Interlock connector	1
Smart-card	1

Optional Accessories

- EL0028 1 DIODE HANDPIECE - 25MW
- EL0029 1 DIODE HANDPIECE - 50MW
- EL0030 1 DIODE HANDPIECE - 100MW
- EL0031 3 DIODE HANDPIECE - 75MW
- EL0032 3 DIODE HANDPIECE - 150MW
- EL0033 3 DIODE HANDPIECE - 300MW
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- EL0035 5 DIODE HANDPIECE - 250MW
- EL0036 5 DIODE HANDPIECE - 500MW
- EL0037 8 DIODE HANDPIECE - 200MW
- EL0038 8 DIODE HANDPIECE - 400MW
- EL0039 8 DIODE HANDPIECE - 800MW
- EL0040 LASER ARM
- EL0041 LASER ARM
- EL0042 L1 ARM
- EL0043 L3-5-8 ARM
- EL0001 PERSONAL SMART CARD
- EL0016 CARRY CASE
- EL12003 TROLLEY
- 02098 LASER PROTECTIVE GOGGLES



EL12062 FISIOLASER IRD 2

Laser therapy equipment with 2 independent outputs with automatic treatment time setting according to the energy to be provided and the area selected, and an indication of the energy transmitted in relation to the treatment time and area. Smart card included. Laser wavelength is 905 nm.



PLUS

2



50

79

50



TECHNICAL FEATURES

Mains voltage:	230 Vac, 50-60Hz, ±10% 115 Vac, 50-60Hz, ±10% on request
Max. Power absorption:	15 VA
Interlock socket/Safety key:	3 contact DIN socket
Backlit LCD Display:	graphic b/w 320 x 240 pixel
Programmable treatment time:	up to 99 minutes
Diode Laser wave length emission:	905 nm
Laser classification EN 60825-1:	3B
Device class 93/42/CEE directive:	II B
Electrical insulation UNI EN 60601-1:	I / BF
Degree of protection by the liquid access UNI EN 60601-1:	IPX0
Programmable pulse frequency:	(200-10.000) Hz
Pulse duration:	100 nsec
Peak power for single diode:	25 W
	50 W
	100 W
	500 W

TARGET POINTING DEVICE CHARACTERISTICS:

Target pointing device characteristics:	Target pointing device UNI EN 60601-2-22	2 light-drive
	Light-drive device	Led-diode
	Light-drive color	Red
	Light-drive representation on the impact point	Spot with red as colour
Typology for emission of the treatment:	Laser-beam positioning:	Always to the centre of the simmetry axis of 2 red spots
		Manual emission
		Automatic emission
Output channels:		Continuous emission
Stored protocols:		2 independent
Storable protocols:		79
External size:		50
Weight:		39x13x32 (probe holders excluded)
		4.30 Kg

Standard Accessories

	Q.TY
Mains power supply cable	1
Fuses	2
Manual of therapies	1
MLA1 Laser probe 25mW	1
Safety laser goggles	2
Interlock connector	1
Smart-card	1

Optional Accessories

- EL0028 1 DIODE HANDPIECE - 25MW
- EL0029 1 DIODE HANDPIECE - 50MW
- EL0030 1 DIODE HANDPIECE - 100MW
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Scanning Laser therapy

How does Scanning Laser therapy work?

Scanning laser therapy works in a similar physiological way to low-power contact laser therapy but it enables to treat larger areas than with contact treatment and it can be done automatically without the presence of an operator. This is possible by combining different powers, different wave lengths and the combined use of the two modes: continuous and pulsed. The FISIOLASER SCAN series unit are medical devices that emits treatments of laser-therapy, both in modality "scanning" through a laser heading, or in modality with probes through the aid of mono-diode and poly-diode probes for the emission of the treatment. The operational room of its use is normally out-patient / hospital / clinical, because the device must be used by the personnel adequately qualified by a medical point of view. The treatments of laser-acupuncture, also usable with the FISIOLASER SCAN series unit, is not covered by the CE0476 certification.

Advantages using scanning laser therapy

- Scanning laser units run in automatic mode, as they do not require an operator to be present.
- Using a scanning laser unit makes it possible to treat larger areas that when a contact laser is used.
- Automatic setting of the treatment area.
- Scanning area adjustable up to 400 cm²
- Possibility of connecting an external single/multidiode laser handpiece.

Treated pathologies

- Arthritis
- Bursitis
- Cervicalgia
- Cervico-arthrosis
- Contractures
- Contusions
- Oedemas
- Haematomas
- Epicondylitis
- Epitrocleitis
- Lumbago
- Backache
- Neuralgias
- Stretchings to the collateral ligaments of the knee
- Tendinitis and ulcers



Mixed Scanning (rhomboidal)



Vertical Scanning



Horizontal Scanning



Horizontal and Vertical Scanning

EL12081 FISIOLASER SCAN 500

Trolley-mounted equipment for scanning laser therapy, power 500 mW. Laser emission 808 nm (pulsed and continuous)

EL12079 FISIOLASER SCAN HP4

Trolley-mounted equipment for scanning laser therapy, power 4 W (2+2). Two wavelength scanning laser device with two simultaneous laser sources: continuous laser emission (808 nm) and pulsed laser emission (940 nm) The combination of the two laser sources allows a high anti-inflammatory effect (808 nm) together with an analgesic effect (940 nm), allowing better results especially in acute phase diseases and with the presence of inflammation (lumbago, sprains, neck pain, etc...).

EL12080 FISIOLASER SCAN HP8

Trolley-mounted equipment for scanning laser therapy, power 8 W. It uses a wavelength of 940 nm, by means of a single 8 W diode.



TECHNICAL FEATURES

Mains voltage		230 Vac, 50-60Hz, ±10%
		115 Vac, 50-60Hz, ±10% (on request)
Max. Power absorption	500	25VA
	HP4	60VA
	HP8	60VA
Interlock socket/Safety key (contacts normally closed)		3 contact DIN socket
Backlit LCD Display		320 x 240 pixel, B/W
Programmable treatment time		up to 99 minutes
Diode Laser wave length emission	500	808 nm
	HP4	808 nm + 940 nm
	HP8	940 nm
Laser classification according to EN 60825-1	500	III B
	HP4	IV
	HP8	IV
Device class 93/42/CEE directive:		II B
Electrical insulation UNI EN 60601-1 standard:		I / BF
Degree of protection by liquid access:		IPX0
Programmable pulse frequency:		(200 ÷ 10000) Hz
Power at source - 200 Hz	500	12.5mW
	HP4	80mW
	HP8	160mW
Power at source - 10000 Hz	500	500mW
	HP4	4000mW
	HP8	8000mW
Output channels:		2 independents
Stored therapeutic suggestions		85
Storable therapeutic suggestions:		200
Dimensions:		39 x H168 x 43 cm
Weight:		35 Kg
TARGET POINTING DEVICE CHARACTERISTICS		
Target pointing device UNI EN 60601-2-22 standard		2 light-drive
Light-drive device:		Led-diode
Light-drive color		Red
Light-drive representation on the impact point		Spot with red as colour



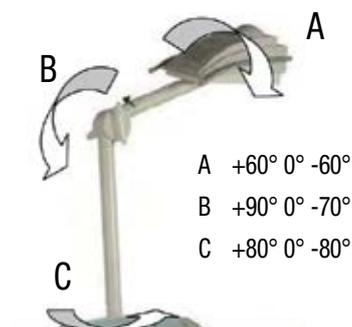
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Standard Accessories

	Q.TY
Mains power supply cable	1
Fuses	2
Manual of therapies	1
Laser protection goggles	2
Interlock connector	1
Smart Card	1

Optional Accessories

- EL0028 1 DIODE HANDPIECE - 25MW
- EL0029 1 DIODE HANDPIECE - 50MW
- EL0030 1 DIODE HANDPIECE - 100MW
- EL0031 3 DIODE HANDPIECE - 75MW
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- EL0043 L3-5-8 ARM
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- 02098 LASER PROTECTIVE GOGGLES



- A +60° 0° -60°
- B +90° 0° -70°
- C +80° 0° -80°