

DOLORCLAST® HIGH POWER LASER

TREAT PAIN AND ACUTE INFLAMMATION
WITH EMS' 300W SUPERPULSED LASER



EMS+

“ The DolorClast® High Power laser has proved to be an invaluable asset to our practice. Its customisable protocols and different modes of action mean it can be adapted to each patient, making it an ideal ally for manual therapy.

The remarkable benefits our patients feel from the very first session give them the confidence they need to recover. Its ease of use and manoeuvrability quickly convinced us to use it almost systematically, increasing the attractiveness of our practice at the same time. ”

MÉLANIE DEUDON

Physiotherapist - Megève, France - 2024



FIRST-LINE THERAPY TO ACUTE CONDITIONS AND SPORTS INJURIES



- ▶ RELIEVE PAIN IN AS LITTLE AS 5 MINUTES
- ▶ TARGET ACUTE INFLAMMATION IN JUST 1 HOUR
- ▶ FOSTER THE REDUCTION OF LOCALIZED SWELLING
- ▶ STIMULATE NATURAL HEALING
- ▶ SUITABLE FOR ALL TYPES OF PATIENTS, EVEN THE MOST SENSITIVE
- ▶ DESIGNED TO OPTIMISE CLINIC WORKFLOW
- ▶ LOW MAINTENANCE
- ▶ POWERFUL YET TRANSPORTABLE

PAVING THE WAY TO **REHABILITATION**
AND SUSTAINABLE **RECOVERY**

OPTIMAL SETTINGS FOR

PEAK RESULTS

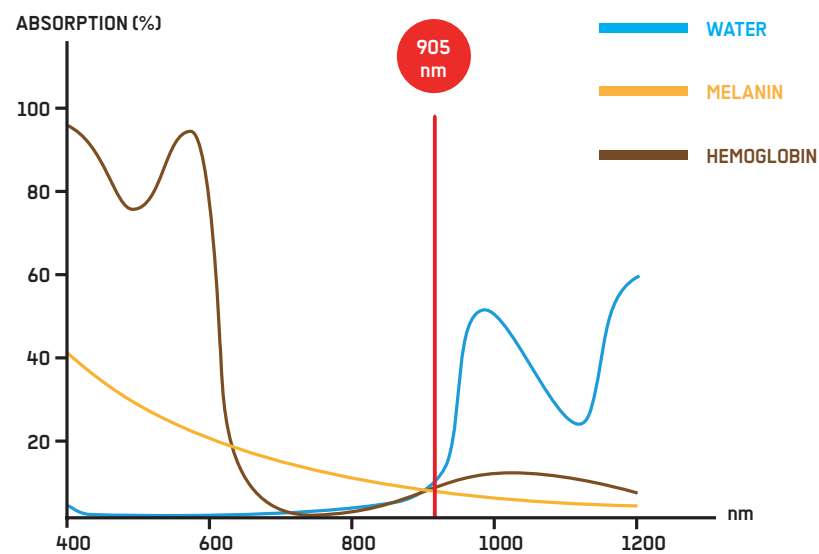


- ▶ WAVELENGTH WITH HIGH TRANSMITTANCE IS NEEDED TO PASS THROUGH THE SKIN BARRIER¹
- ▶ HIGH PEAK POWER IS ESSENTIAL TO DELIVER THERAPEUTICALLY EFFICIENT ENERGY TO SUBCUTANEOUS TISSUES¹
- ▶ SUPERPULSED EMISSION IS KEY TO TRANSFER HIGH ENERGY WITHOUT THERMAL INCREASE¹
- ▶ TOP-HAT BEAM PROFILE ENSURES HOMOGENEOUS DISTRIBUTION OF ENERGY TO THE TISSUES¹

WHAT SCIENCE SAYS

905NM WAVELENGTH MAXIMUM TRANSMITTANCE AND EFFECTS

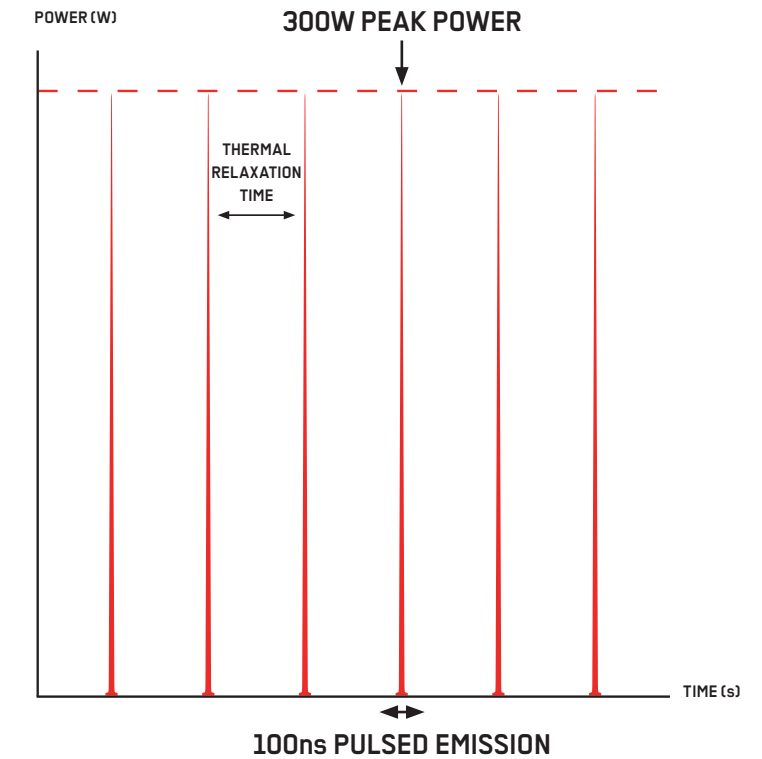
- ▶ Minimally absorbed by water, blood and melanin¹⁻²
- ▶ Transmits high energy through the skin barrier
- ▶ Elicits quick pain relief in just 3 min.³
- ▶ Reduces acute inflammation in 1 hour facilitating healing.⁴
- ▶ Mimicks the effect of nonsteroidal anti-inflammatory drugs (NSAIDs) without related side-effects.



1. KAUB ET AL., BIOMEDICINES. 2022, 10, 3204.
 2. KAUB ET AL., BIOMEDICINES. 2023 MAY 4;11(5):1355
 3. MEZAWA ET AL., ARCH OF ORAL BIOL. 1988; 33(9): 693-694
 4. BJORDAL ET AL., BRIT.J.SPORTS MED. 2006; 40(1): 76-80

300W PEAK POWER MAXIMUM ACTIVATION BELOW THE SKIN

- ▶ 10x more powerful than gated laser.
- ▶ Maximizes the laser energy delivery in targeted subcutaneous tissues.
- ▶ Delivers therapeutic dosage quickly, keeping treatments short.



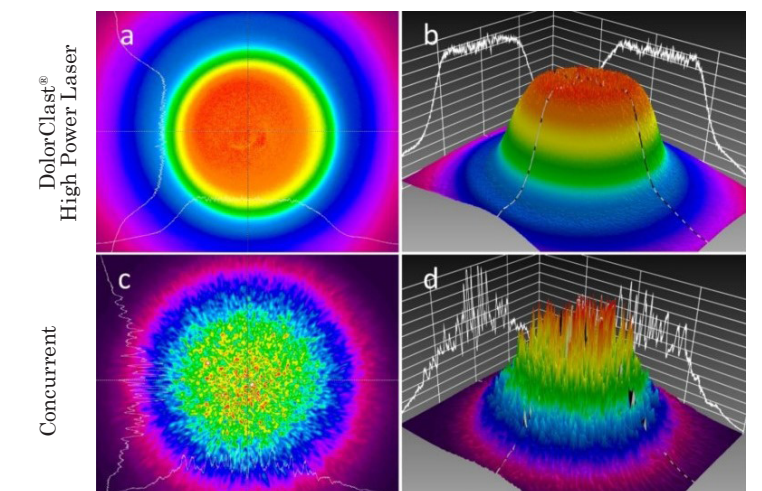
100 NS SUPERPULSES MAXIMUM THERMAL RELAXATION TIME

- ▶ Real superpulsed emission transmitting high energy into targeted tissues
- ▶ 100x shorter pulses than gated lasers
- ▶ Provides enough relaxation time to reduce risks of thermal increase and protein damages.

TREAT DON'T HEAT

UNIFORM BEAM MAXIMUM DISTRIBUTION

- ▶ Uniform laser beam ensuring homogeneous and effective distribution of the energy.¹
- ▶ Prevents inefficient treatments from underdosing and thermal injury from overdosing.



Power density maps recorded with a beam profiling camera.¹

DESIGNED TO TAKE ON

YOUR CHALLENGES



“ Treating 60 patients a day need an efficient and effective physical modality treatment device. Thanks to the GDT protocol and automatic mode of Dolorclast® High Power Laser which helped me to give the best treatment for my patients. ”

DR. ARIF SOEMARJONO

Doctor in Physical Medicine and Rehabilitation, Bandung, Indonesia - 2024



TAILOR TREATMENTS TO EACH PATIENT

- ▶ 40 preset protocols by indication.
- ▶ 7 action-modes to focus on desired effects (analgesic, anti-inflammatory, anti-oedema etc.) or skin type.
- ▶ Customized protocols available (time and energy dose).
- ▶ Preset GDT protocol for quick pain relief.

VERSATILE TREATMENTS

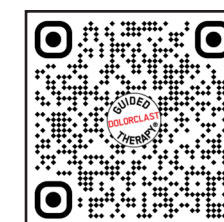
- ▶ Manual mode, used directly in contact with the skin, is ideal for delivering a high level of energy in a short time. It can be used to treat a specific point or to cover a large area.
- ▶ Automatic hands-free mode ideal for combining treatment modalities simultaneously.
- ▶ Clear display and control of treatment settings in real time on screen.

JUST FOCUS ON TREATING

- ▶ Low maintenance with no need for calibration.
- ▶ Cart easy to move around the practice.
- ▶ Lightweight (8 kg) to treat patients wherever they are.
- ▶ Transportation case (Optional).



REQUEST
A DEMO



REFERENCES

DOLORCLAST HIGH POWER LASER CONTROL UNIT FT-245#		ACCESSORIES
▶ 1x Console with handpiece	FT-245	▶ Cart DW-1005
▶ 2x Fuses T1.6A	CE-068	▶ Arm DT-1004
▶ 2x Safety goggles	DZ-1004	▶ Transportation case DP-1098
▶ 2x Ignition key	DT-1006	
▶ 1x Interlock connector	DT-1005	
▶ 1x Replacement kit lens	FR-345	
▶ 1x User manual	FB-1007	
▶ 1x Power supply cable (as per country specifications)		

TECHNICAL SPECIFICATIONS

PRODUCT CLASSIFICATION	MDD 93/42/EEC: Device Class IIb - Cart and arm Class I EN 60601-1: Device Class I - Applied part B IEC 60529: IP 20 IR Laser source class 4 (EN 60825-1:2007-10)
WAVELENGTH	905 nm
PEAK POWER AT HANDPIECE	300 W
PULSE DURATION	100 ns
REPETITION RATE	5 kHz - 80 kHz
PEAK MODULATION	From 5% to 100%
NOMINAL OCCULAR HAZARD DISTANCE (NOHD)	1 m
POWER VOLTAGE AND FREQUENCY	230 VAC, 50 Hz
ABSORBED ELECTRICAL POWER	100 VA (max)
FUSES	T1.6AL 250V (time-delay fuses, 5x20 mm)
DEVICE DIMENSIONS & WEIGHT	170 x 380 x 440 mm - 8kg
OPERATING TEMPERATURE	FROM 15°C TO 35°C
GUIDE LIGHT	EN 60825-1:2007-10: Class 3R Wavelength: 635 nm Power: 4mW

LASER RADIATION: Avoid eye or skin exposure to direct or scattered radiation - Class 4 laser product. CAUTION - Laser radiation when open and interlocks defeated

Contact your EMS-authorized distributor:

WWW.EMS-DOLORCLAST.COM

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