

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 FOR ACUTE PATHOLOGIES AND SPORTS INJURIES



- ▶ REDUCES PAIN TRANSMISSION IN JUST 3 MINUTES ¹
- ▶ DECREASES ACUTE INFLAMMATION IN JUST 1 HOUR ²
- ▶ PROMOTES THE REDUCTION OF LOCALIZED SWELLING
- ▶ STIMULATES NATURAL HEALING
- ▶ SUITABLE TO MOST TYPES OF PATIENTS, EVEN THE MOST SENSITIVE
- ▶ DESIGNED TO OPTIMIZE CLINIC WORKFLOW
- ▶ LOW MAINTENANCE
- ▶ POWERFUL YET TRANSPORTABLE

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

OPTIMAL SETTINGS FOR

PEAK RESULTS

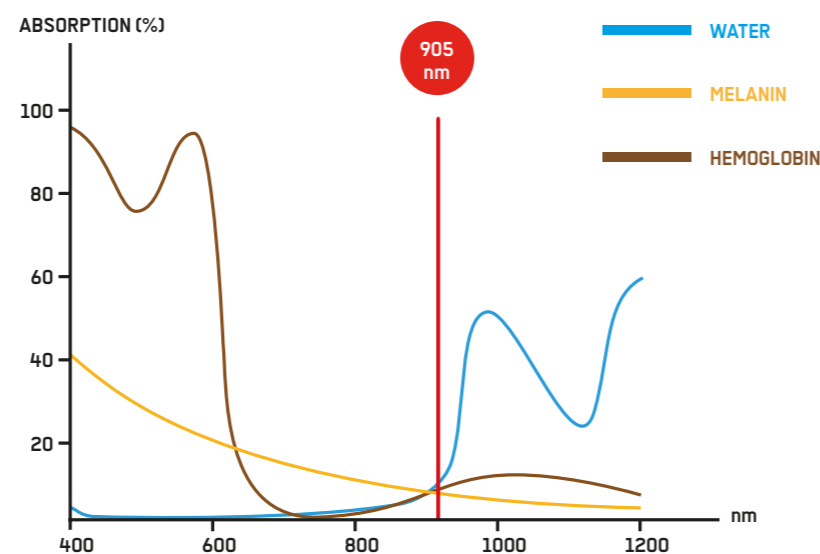


- ▶ WAVELENGTH WITH HIGH TRANSMITTANCE IS NEEDED TO PASS THROUGH THE SKIN BARRIER³
- ▶ HIGH PEAK POWER IS ESSENTIAL TO DELIVER THERAPEUTICALLY EFFICIENT ENERGY TO SUBCUTANEOUS TISSUES³
- ▶ SUPERPULSED EMISSION IS KEY TO TRANSFER HIGH ENERGY WITHOUT THERMAL INCREASE³
- ▶ TOP-HAT BEAM PROFILE ENSURES HOMOGENEOUS DISTRIBUTION OF ENERGY TO THE TISSUES³

WHAT
SCIENCE
SAYS

905NM WAVELENGTH MAXIMUM TRANSMITTANCE AND EFFECTS

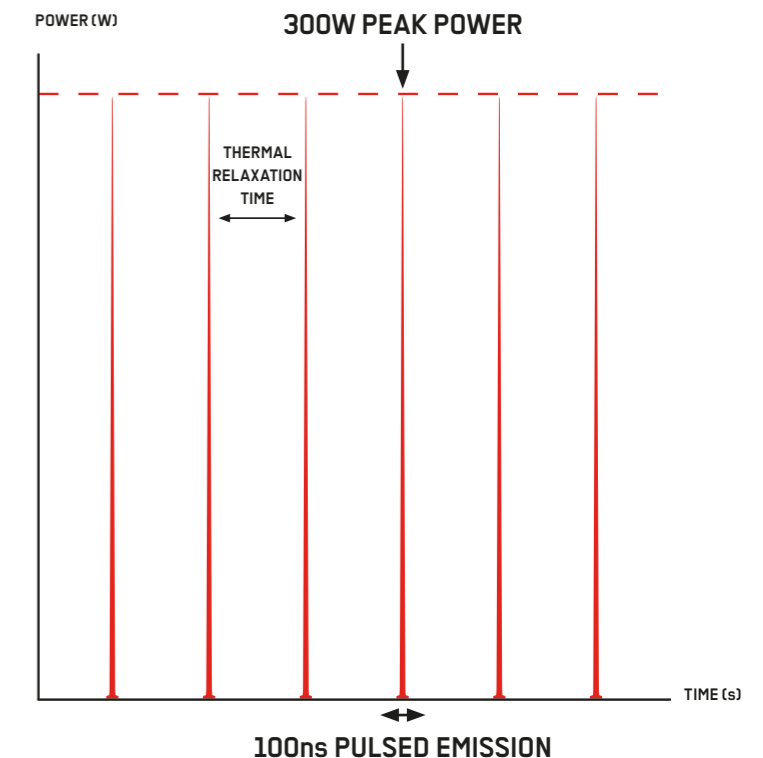
- ▶ Minimally absorbed by water, blood and melanin.³⁻⁴
- ▶ Transmits high energy through the skin barrier.
- ▶ Elicits quick pain relief in just 3 min.¹
- ▶ Reduces acute inflammation in 1 hour facilitating healing.²
- ▶ Mimicks the effect of nonsteroidal anti-inflammatory drugs (NSAIDs) without related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



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

300W PEAK POWER MAXIMUM ACTIVATION BELOW THE SKIN

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



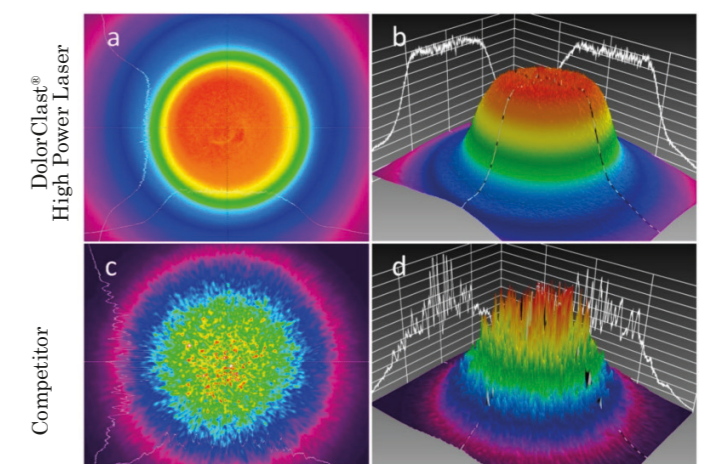
100 NS SUPERPULSES MAXIMUM THERMAL RELAXATION TIME

- ▶ 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 damage.

TREAT
DON'T HEAT

UNIFORM BEAM MAXIMUM DISTRIBUTION

- ▶ Uniform laser beam ensuring homogeneous and effective distribution of the energy.³
- ▶ Prevents inefficient treatments from underdosing and thermal injury from overdosing.



Power density maps recorded with a beam profiling camera.³

DESIGNED TO TAKE ON

YOUR CHALLENGES



“Treating 60 patients a day requires an efficient and effective physical modality treatment device. Thanks to its automatic mode, the Dolorclast® High Power Laser 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

- ▶ Preset parameters to guide application depending on the treatment location.
- ▶ 5 specific action-modes to focus on desired effects (Pain relief, anti-inflammatory, anti-oedema, anabolic stimulus and myorelaxant).
- ▶ Create and record your own treatment protocols.

VERSATILE TREATMENTS

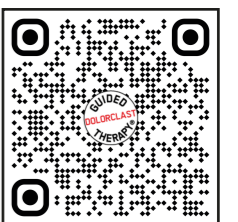
- ▶ Manual mode: ideal for delivering a high level of energy in a short time. It can be used to treat a specific point or to cover a large area.
- ▶ Automatic hands-free mode: ideal for combining treatment modalities simultaneously.
- ▶ Clear display and control of treatment settings in real time on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

JUST FOCUS ON TREATING

- ▶ Low maintenance with no need for calibration.
- ▶ Cart: easy to move around the practice.
- ▶ Lightweight (7 kg): to treat patients wherever they are.
- ▶ Transportation case (Optional).



REQUEST
A DEMO



REFERENCES

DOLORCLAST® HIGH POWER LASER		FT-245#	ACCESSORIES	
▶ 1x Console with handpiece		FT-245	▶ Cart	DW-1005
▶ 2x Fuses T3. 15AH		CE-1007	▶ Arm	DT-1004
▶ 2x Safety goggles		DZ-1004	▶ Transportation case	DP-1098
▶ 2x Ignition key		DT-1006		
▶ 1x Interlock connector		DT-1005		
▶ 1x User manual		FB-1007		
▶ 1x Power supply cable (as per country specifications)		CD-XXX		

TECHNICAL SPECIFICATIONS

PRODUCT CLASSIFICATION	(EU) 2017 / 745: 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 40% to 100%
NOMINAL OCCULAR HAZARD DISTANCE (NOHD)	1 m
POWER VOLTAGE AND FREQUENCY	100-240 VAC, 50/60 Hz
ABSORBED ELECTRICAL POWER	50 VA (max)
FUSES	T3. 15AH 250 V (time-delay fuses, 5x20 mm)
DEVICE DIMENSIONS & WEIGHT	170 x 380 x 440 mm - 7kg
OPERATING TEMPERATURE	From 15 °C to 35 °C
GUIDE LIGHT	EN 60825-1:2007-10: Class 3R / Wavelength: 635 nm / Power : 4 mW

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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