

# LIGHT



**Introducing  
The New  
Laser Sys\*Stim® 540  
For Light Therapy.**

Shine a new light on your practice with the newest member of Mettler Electronics' product line for therapy, the Laser Sys\*Stim 540. This exciting new device features a laser applicator at 785 nm for deep tissues. While the optional cluster applicator with 950 nm SLDs and 660 nm LEDs allows the clinician to treat larger areas.

The control unit allows the clinician to set treatment time, continuous/pulse modulation modes and laser output energy. In addition,

ten user-defined programs are available for fast and easy treatment setup. Laser output can be adjusted via controls on both the laser and cluster applicators.

Each Laser Sys\*Stim 540 comes with a battery so you can take light therapy with you on the road. A built-in sensor allows you to check the laser output to verify that it's working. Find out more about how you can introduce light therapy into your practice today. Call 416-502-3700 for more information. You can also visit our website at [www.kosim.ca](http://www.kosim.ca) or [www.mettlerelectronics.com](http://www.mettlerelectronics.com).

**Kosim**  
ideal for health

# Introducing The New Laser Sys Stim™ 540



Laser Applicator showing one laser diode at 785 nm surrounded by 3 LEDs at 470 nm.



Cluster Applicator showing 12 SLDs at 950 nm with seven LEDs at 660 nm.



Laser applicator over laser output sensor showing visible proof of laser activity.

## Specifications

### General Information:

Voltage:	110 to 240 Volts AC
Frequency:	50/60 Hz
Power:	Less than 150 VA
Battery:	Sealed lead acid, 12 Volt, 0.8 AH
Operation time on battery:	Greater than 30 minutes
International standards:	EN60601-1 1990 EN60601-2-22 1996
Dimensions:	9.4 in. (W) x 4.7 in. (H) x 9.4 in. (D)
Weight:	5.5 lbs.
Laser output meter:	Infrared photo sensor integrated into the top panel

### Laser Performance:

Output power:	
Laser diode applicator	80 mW at 785nm (export 810nm)
Optional cluster applicator	500 mW at 660/950nm
Delivered energy:	0.01 to 99.99 Joules
Operation modes:	Continuous and Pulsed
Pulse mode:	
Pulse width:	
Laser:	100 µs nominal
Cluster:	50% duty cycle
Pulse frequency:	
A)	Continuous
B)	10 Hz, 25 Hz, 50 Hz, 100 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 5 kHz
C)	Sweep from 10 to 5 kHz
Timer	0 to 99 minutes 59 seconds

### Laser Applicator Specifications:

Wavelength:	810 nm
Power:	80 mW
Treatment area illumination:	Three blue LED's (470 nm)
Output activation:	Capacitance switch on applicator handle
Beam spot:	Elliptical beam spot 2.8 mm x 1.1 mm (elliptical beam area of = 9.2 mm <sup>2</sup> ) at the aperture.
Divergence:	Elliptical beam divergence 18 degrees and 7 degrees
Eye protection:	Uvex glasses with a minimum of 80% attenuation in the wavelength range of 780 nm to 860 nm. The Uvex glasses supplied with the unit meet these requirements.

### Optional Cluster Applicator Specifications:

SLD:	Twelve 950 nm Super luminescent Diodes
LED:	Seven 660 nm Light Emitting Diodes
Total Power	500 mW
Treatment area illumination:	The 660 nm LED's are visible and illuminate treatment area
Output activation:	Capacitance switch on applicator handle
Treatment area:	3.4 cm <sup>2</sup>
Eye protection:	Uvex glasses with a minimum of 80% attenuation in the wavelength range of 780 nm to 1200 nm. The Uvex glasses supplied with the unit meet these requirements.