

The neoV for Percutaneous Laser Disc Decompression (PLDD)

Surgical power
was never so small



The neoV surgical laser platform with your choice of 1470nm or 980nm - The smallest, lightest weight, and most portable laser system of its power class.



The neoV Laser

The World's Smallest 25 Watt Laser

neoLaser, a family owned company, was founded in Israel, both a cradle of innovation and a place with decades of in-depth industry leadership in medical laser technology.

The neoLaser team, with over 20 years of combined medical laser industry experience, and having brought to successful launch pioneering laser technology, is now embarking on a new and exciting path of innovation.

neoLaser is proud to launch the neoV laser platform, with its groundbreaking design. With the ultimate commitment to innovative design, detail oriented craftsmanship, and top-notch quality, neoLaser and its products will stand apart from the industry. We are here to serve your surgical needs and to work with you to develop the optimal and best designed laser based surgical solutions for your practice. We welcome your business.

Gil Shapira, Founder President & CEO

Good things come in small packages and the neoV laser is no exception.

This small, portable, superbly designed unit delivers an accurate 1470nm laser beam or a powerful 25W 980nm energy for a state of the art PLDD procedure – World class design, performance and value.



KEY FEATURES

980 or 1470 wave-length
Up to 28 Watts (Laser Head)
Special PLDD Kits

EASE OF USE

Large high-brightness color touch screen
Intuitive user interface
Plug and play fiber connection
Rapid setup with surgeon presets
Green aiming beam for easy aiming

UNIQUE VALUE

Enhanced safety features
High reliability and low maintenance
Portability
Standard power connection



Percutaneous Laser Disc Decompression (PLDD)



PLDD is a minimally invasive treatment utilizing laser energy for relieving back and neck pain caused by a herniated disc.

A laser fiber is inserted through a small needle into the herniated disc under local anesthesia. Thermal effects caused by the delivered laser energy lead to desired therapeutic effect.

The procedure can be performed in an outpatient setting and leaves no scars, eliminating potential complications of open and more radical surgery.

The neoV platform with neoLaser's PLDD set, is a perfect solution for your PLDD cases.

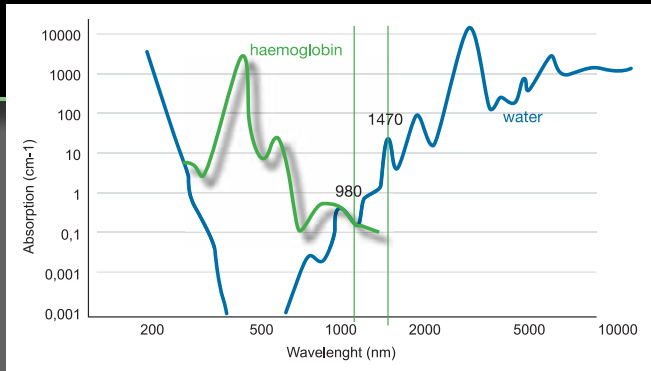


The treatment principle of PLDD is based on the concept of the intervertebral disk being a closed hydraulic system: An increase in water content of the nucleus pulposus leads to a disproportional increase of intradiskal pressure. A reduction of intradiskal pressure causes the herniated disk material to recede toward the center of the disk, thus leading to reduction of nerve root compression and relief of radicular pain. In PLDD, this mechanism is exploited by application of laser energy to evaporate water in the nucleus pulposus. In addition, the increase in temperature also causes protein denaturation and subsequent renaturation. This causes a structural change of the nucleus pulposus, limiting its capability to attract water and therefore leading to a permanent reduction of intradiskal pressure.

The 1470nm laser, due to its peak of water absorption, enables more precise and localized application of heat during application, enabling precise ablation of the bulging in the disc, which is highly beneficial.



The interaction/wavelength choice



The neoV laser comes in 2 versions – the 980nm and the 1470nm.

The 980nm laser is a powerful tool for vaporization and generally for rapid surgical work.

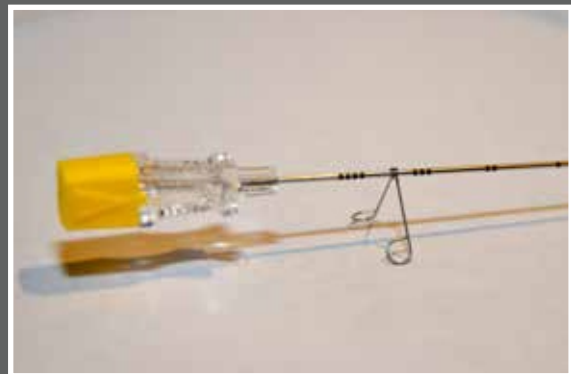
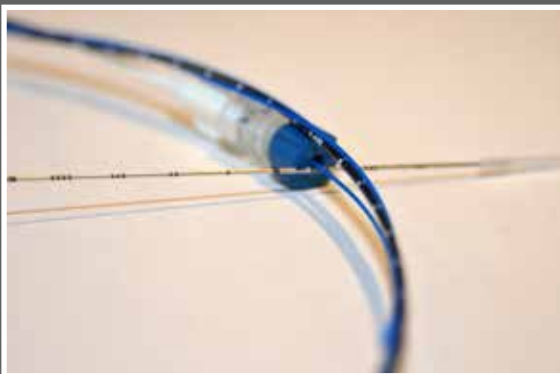
The 1470nm laser with significantly higher absorption in water, provides a superior precision instrument for fine surgical work with reduced collateral damage around critical structures.

Fiber Delivery and Accessories

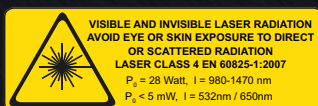


The neoLaser PLDD kit includes everything you need for a safe, effective and minimally invasive PLDD or Denervation procedure. The sterile kit include a 400 micron bare fiber with jacket protection, 2 sizes of needles, 20G and 18G for your choice of entry, and a Y Connector allowing fiber entry and suction. The connector and needles are individually packed to enable maximum flexibility in treatment.

Whatever your surgical needs, the neoV platform is your solution .



DESIGNED FOR SURGERY



Laser Specification		
Laser Wavelength	980 nm	1470nm
Display / Control	Color Touch-Screen	
Output Power (Laser)	28W	12W
Aiming Beam	532nm or 650nm, adjustable	
Fiber Connection	Proprietary	
Operating Modes	CW, Pulsed	
Power Requirements	19 VDC, 4.7 A	
Dimensions (HxWxD)	10 x 22 x 22 (cm)	
Weight (without case)	3.5 Kg	

PLDD Kit	
Fiber	400micron bare fiber 2.6m, sterile
Adapter	Special Y-Connector sterile
Needles	18G Chiba Needle 20G Chiba Needle