

# MicroPulse P3<sup>®</sup> Delivery Device

For MicroPulse<sup>®</sup> Transscleral Laser Therapy,  
a versatile and non-incisional glaucoma procedure

- Intuitive design, portable, and easy to use
- Can be used in the office and operating room
- Used in more than 200,000 procedures since 2015
- Available in more than 80 countries and used in the top hospitals
- Can be used before, in combination with, or after other glaucoma procedures





Photo courtesy of Nir Shoham-Hazon, MD

# MICROPULSE® TRANSSCLERAL LASER THERAPY

MicroPulse TLT is a cost-effective combination of safety, effectiveness, and repeatability in a non-incisional approach to glaucoma care.<sup>1-17</sup> More than 180,000 glaucoma patients in over 80 countries have been treated since 2015 with MicroPulse TLT using the MicroPulse P3® Delivery Device. MicroPulse TLT can be introduced before, in combination with, or after other glaucoma treatments. The procedure can be performed in less than seven minutes, and in most cases, patients can resume their normal activities within 24 hours. Indications include, but are not limited to, transscleral cyclophotocoagulation for the treatment of primary open-angle glaucoma, closed-angle glaucoma, and refractory glaucoma.

- Achieves a success rate of 60% to 80%<sup>1-17</sup> and IOP reduction of 30% to 45%<sup>1, 3, 6, 9-15, 17, 18</sup>
- Can help to reduce drug burden in eye drops and oral medications<sup>1-4, 6-13, 18</sup>
- Reaches durability of up to 72 months with 3 retreatments<sup>19</sup>
- Can be performed in the office or operating room
- Requires limited amount of immediate follow-up
- Leaves future treatment options open
- Patient downtime is significantly low
- Covered under CPT 66710 in the United States



Learn More

## Clinical Evidence

More than 32 peer-reviewed studies have been published about MicroPulse TLT



### SAFE

Over 70 studies show consistently low adverse events



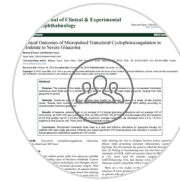
### EFFECTIVE

Over 70 studies show sustained IOP reduction, some with 30-45% in 60-85% of patients



### DURABLE

Over 500 eyes in studies demonstrating durability greater than 12 months



### VERSATILE

Over 2,500 eyes studied in a wide spectrum of glaucoma types and severities

## Patients to Consider\*

- o Maximum tolerated medical therapy and compliance issues
- o Pre trabeculectomy, stent or filter
- o Failed trabeculectomy, stent or filter
- o Eyes with compromised ocular surface







As I saw the results and how comfortable my patients were, I started to expand its use, and now I use it for various types of glaucoma cases.”



Sandra Fernando Sieminski, MD  
Ross Eye Institute  
Buffalo, NY USA



The revised MicroPulse P3 Device is intuitive and easy to use. The design delivers energy in a much more consistent fashion and allows for very stable contact on the sclera.”



Brian A. Francis, MD  
Doheny Eye Institute, UCLA  
Los Angeles, CA USA





## Surgical Guide

1. A viscous, liquid interface (e.g. methyl cellulose) must be utilized to ensure proper light coupling to the conjunctiva. Place a drop on the undersurface of the probe footplate. Reapply as necessary. Not using a liquid interface could result in an inconsistent application of laser energy.
2. Orient the probe with the wide, curved side (bunny ears) aligned at the surgical limbus to ensure consistent treatment application. Be sure to view from directly above to avoid placement error because of parallax.
3. Maintain the entirety of the probe footplate flat against the conjunctiva throughout the treatment while applying constant and gentle pressure (Figure 1). Do not rock the probe while sweeping.
4. Treat one hemisphere or quadrant of the eye at a time. Sweep the MicroPulse P3 Probe along the limbus in an arc of 75 degrees per quadrant (Figure 2) or 150 degrees per hemisphere (Figure 3) for between 10 - 20 seconds. Reverse the direction and repeat for a total of 3-5 passes. Avoid the 3 and 9 o'clock meridians.
5. Average laser powers of 2000mW - 2500mW at a duty cycle of 31.3% have been reported safe and effective by physicians in published scientific literature.<sup>20, 21</sup>

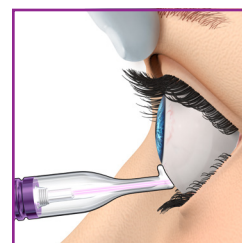


Figure 1

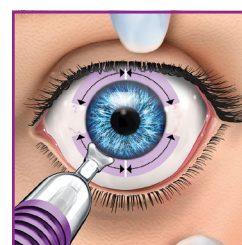


Figure 2

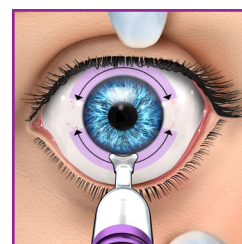


Figure 3

<sup>20</sup> Nguyen AT, Maslin J, Noecker RJ. Early results of micropulse transscleral cyclophotocoagulation for the treatment of glaucoma. *Eur J Ophthalmol*. 2020;30(4):700-705.

<sup>21</sup> Kaba Q, Somani S, Tam E, Yuen D. The effectiveness and safety of micropulse cyclophotocoagulation in the treatment of ocular hypertension and glaucoma. *Ophthalmol Glaucoma*. 2020;3(3):181-189.

Specifications of the Cyclo G6® Laser

Wavelength	810 nm infrared
Weight	4.8 kg (10.5 lb)
Dimensions	27 cm x 29.5 cm x 19.7 cm (10.6" W x 11.6" D x 7.8" H)
Connector Type	SmartProbe RFID with Laser Parameter Memory
Electrical	100-240 VAC, 50/60 Hz, <0.8 A
Cooling	Air cooled
Exposure Duration	CW-Pulse: 10 ms – 9000 ms in 606 increments and continuous pulse up to 60 seconds
Exposure Interval	CW-Pulse: 10 – 3000 ms in 598 increments and One Pulse
MicroPulse® Duration	MicroPulse: 0.05-1.0 ms in 19 increments
MicroPulse Interval	MicroPulse: 1.0-10.0 ms in 90 increments
MicroPulse Duty Cycle	Continuously adjustable from 0.5%-50%, and preset selections of 5%, 10%, and 15% duty cycles
Aiming Beam	Diode laser, 635 nm nominal
Treatment Power	50-3000 mW, depending on delivery device




Ordering Information

Product	Product Number	Units per Box
MicroPulse P3® Device	15522	6
Cyclo G6® Laser	CYCLO-G6-SYSTEM	

The MicroPulse P3 Device is a single-use device. Specifications are subject to change without notice. Products are covered by one or more of the following U.S. patents: 5,511,085; 5,982,789; 6,327,291; 6,540,391; 6,733,490; 7,766,904; 7,771,417; 7,909,816; 5,997,498; 6,073,759; 6,092,898; 6,217,594; 6,494,314; 6,585,679; 6,726,666; 6,800,076; 6,866,142; 7,537,593; 8,177,777; 8,945,103; 783783; 69530497.6; KR 348012; 0904615; 69706541.3; CA 2331837; AU 759193; JP 4149670; EP 1009684; CA 2286002; JP 449444; JP 4570696; JP 4819754; JP 5123973; JP 5133069. U.S. and international Patents Pending may apply.

<sup>1</sup> Zaarour K, et al. J Glaucoma 2019. <sup>2</sup> Subramaniam K, et al. Cornea 2019. <sup>3</sup> Nguyen AT, et al. Eur J Ophthalmol 2019. <sup>4</sup> Barac R, et a. Romanian J Ophthalmol 2018. <sup>5</sup> Sanchez FG, et al. Arch Soc Esp Oftalmol 2018. <sup>6</sup> Lee JH, et al. J Glaucoma 2017. <sup>7</sup> Sarrafpour S, et al. Ophthalmology Glaucoma 2019. <sup>8</sup> Awoyesuku EA, et al. JAMMR 2019. <sup>9</sup> Abdelrahman AM, et al. J Glaucoma 2018. <sup>10</sup> Aquino MC, et al. Clin Exp Ophthalmol 2015. <sup>11</sup> Jammal AA, et al. Arq Bras Oftalmol 2019. <sup>12</sup> Tan A, et al. Clin Experiment Ophthalmol 2010. <sup>13</sup> Williams AL, et al. J Glaucoma 2018. <sup>14</sup> Varikuti VNV, et al. J Glaucoma 2019. <sup>15</sup> Souissi S, et al. Eur J Ophthalmol 2019. <sup>16</sup> Magacho L, et al. Lasers Med Sci 2019. <sup>17</sup> Magacho L, et al. J Glaucoma 2019. <sup>18</sup> Yelenskiy A, et al. J Glaucoma 2018. <sup>19</sup> Aquino MC, et al. European Glaucoma Society 2016.

ECREP

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VISIBLE AND INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
CLASS II LASER PRODUCT  
CLASS II LASER PRODUCT  
(IEC 60825-1:2014)

λ = 810 nm P<sub>o</sub> = 3 W  
λ = 635 nm P<sub>o</sub> = 1 mW