IRIDEX®

Iridex 532®
Iridex 577®
Lasers

650.962.8100 | customerservice@iridex.com | iridex.com

Iridex 532 and Iridex 577 Lasers

Green 532nm and True-Yellow 577nm Lasers with patented MicroPulse® Technology

Comprehensive Treatment Reports*

Create detailed reports of treatment parameters used for each treatment. Reports can be saved, viewed, deleted, or downloaded to a USB.

Configurable Preset Filters

Create custom filters by physician and/or device. Simply program, manage, view, and select your presets with Iridex's NEW preset management tool.

Multi-Functional Single Control Knob

Simplifies console navigation, field selection, and energy adjustments.

7” High-Resolution Touchscreen Display

Easily move between laser status screens and treatment options with a large, dimmable LED-backlit color display.

Continuous-wave and MicroPulse® Technology

Conveniently toggle between treatment modes with a two-step safety lock.

Delivery Device Driven User Interface

Physicians will see an optimized user interface based on the delivery device connected to the console.

* No personal or identifying patient information is saved to the software.

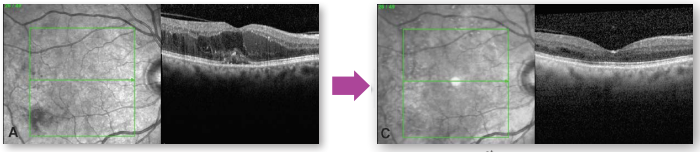
Standard Photocoagulation & MicroPulse® Technology in One Laser

MicroPulse Application

- Fovea-Friendly™ MicroPulse Laser Therapy for retinal disorders[1]

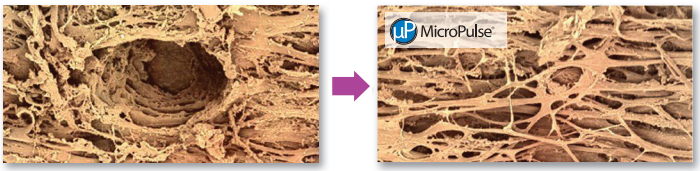
MicroPulse®

- Repeatable MicroPulse Laser Trabeculoplasty (MLT) for glaucoma therapy



Pre-treatment: CRT 458 µm | VA 20/40

17 mos post 1st MicroPulse, 4 mos post 4th MicroPulse: CRT 206 µm, no macular edema | VA 20/20-2



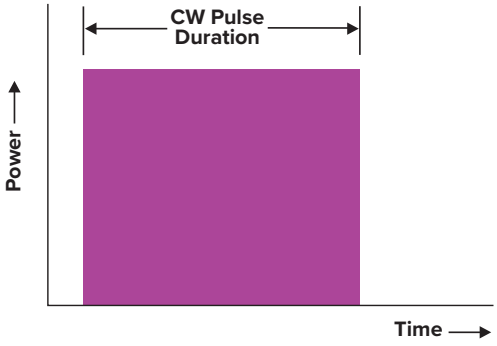
Trabecular meshwork after ALT

Trabecular meshwork after MLT

What is MicroPulse Technology?

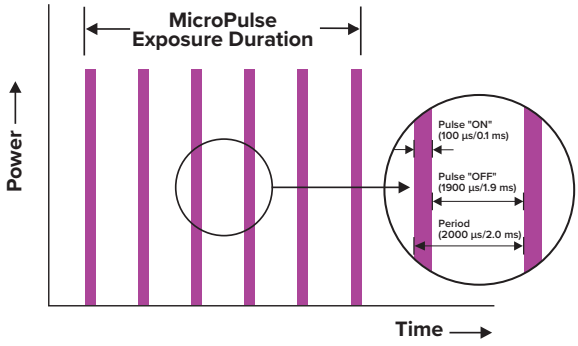
CW-Pulse™ (Continuous-Wave) Mode

CW lasers deliver a steady stream of laser energy, even with the shortest exposure duration. This results in a significant thermal rise and consequent coagulation used clinically for many applications.



MicroPulse Mode*

MicroPulse technology finely controls thermal elevation by "chopping" a continuous-wave (CW) beam into an envelope of repetitive short pulses allowing tissue to cool between pulses and reduce thermal buildup.

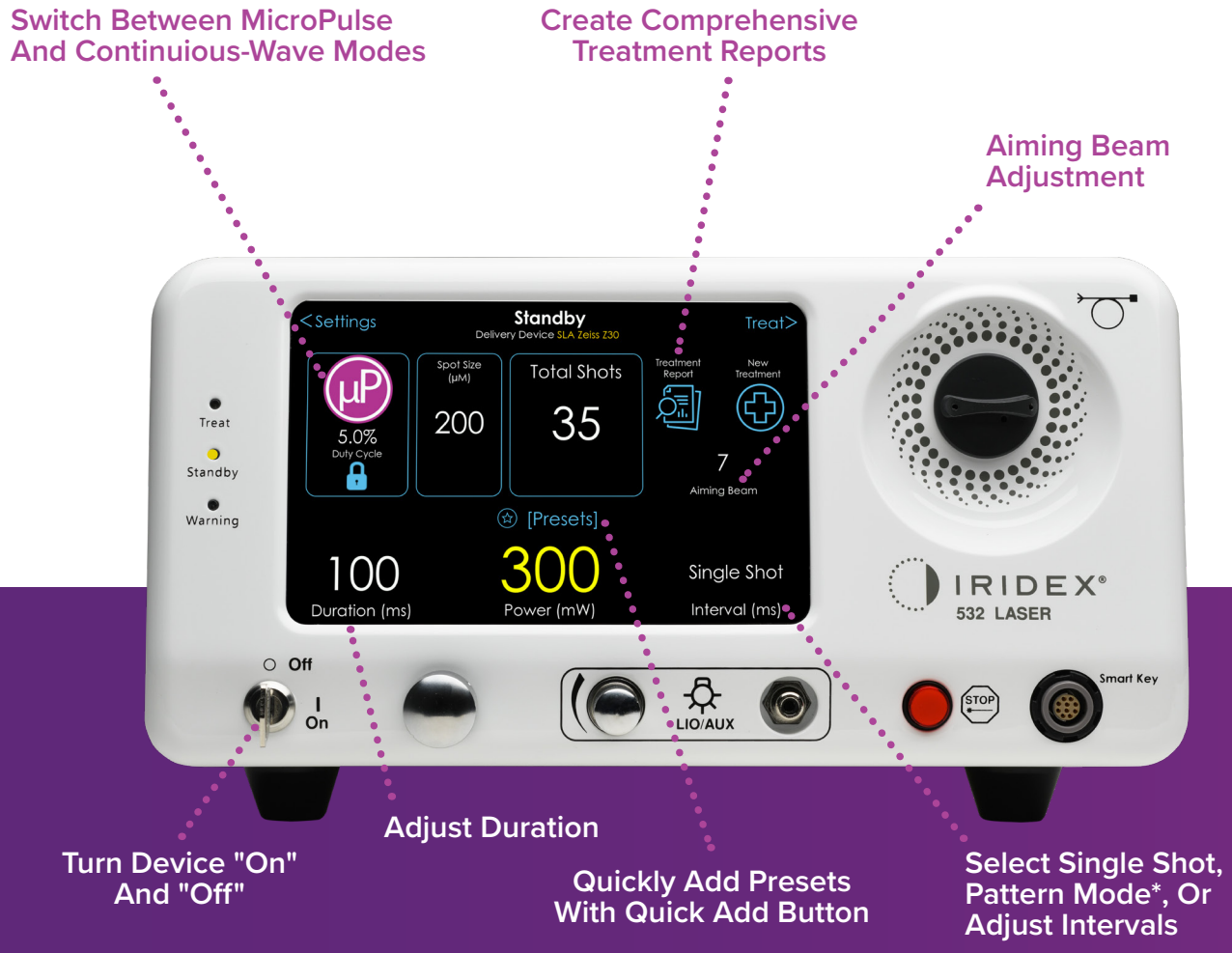


1. Bhagat N, Zarbin M, Mansour S, Chong V, and Cardillo JA. Fovea-friendly MicroPulse Laser. Supplement to Retina Today May/June 2012

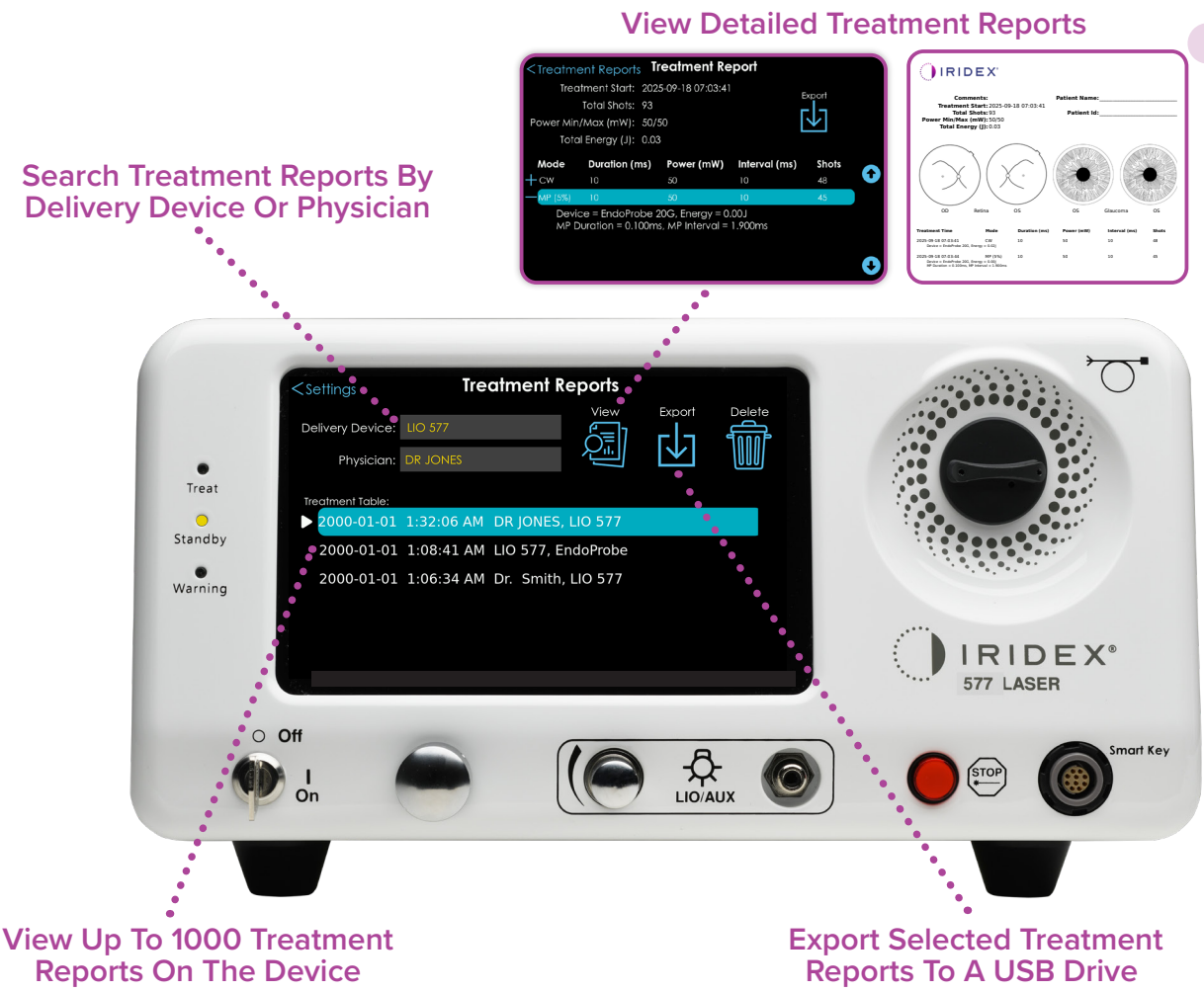
* MicroPulse is an optional Module.

Maximize Retina Workflow

The Iridex 532 and Iridex 577 lasers offer physicians an intuitive touchscreen interface providing a wide range of clinical control options and features to optimize the treatment of retinal disorders. The new interface allows physicians to easily access treatment presets and options to maximize patient chair time and optimize their clinical work flows.



*Pattern mode is only available when laser console is connected to a TxCell® delivery device.



Streamline Treatment Reporting

In addition to the enhanced user interface, the Iridex 532 and Iridex 577 Lasers offer practices more streamlined reporting with the option to export treatment reports directly from the device to the USB. The new treatment reports screen displays up to 1000 treatment reports. View, export, and delete selected treatment reports to streamline your treatment reporting workflow.

Why Choose the 577nm Wavelength?

The IRIDEX 577® Laser offers a true-yellow, 577 nm, wavelength with peak absorption in oxyhemoglobin and is minimally absorbed by xanthophyll (see Figure 1) which allows treatment closer to the fovea. It also offers:

- High transmission through dense ocular media[1,2] and less light scattering than shorter wavelenghts which minimizes spot size and reduces thermal spread
- Consistent laser lesions for fast procedure time (see Figure 2)
- Enhanced visibility for reduced intraretinal damage[2] enabling early observation of very light tissue reactions at the level of the retinal pigment epithelium (RPE)
- Lower transmission to deeper tissues,[2,4] and low power requirements for increased patient comfort[3]

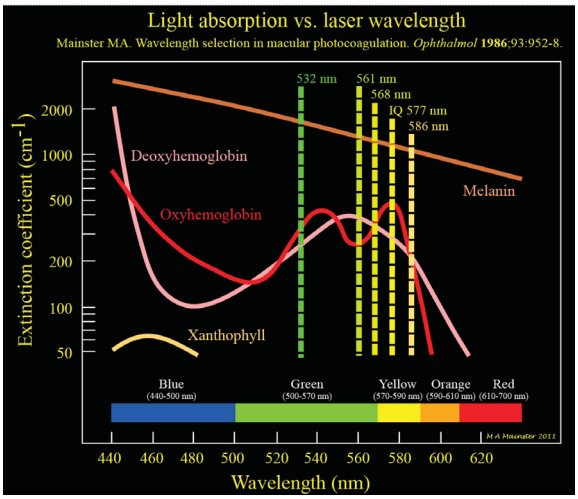
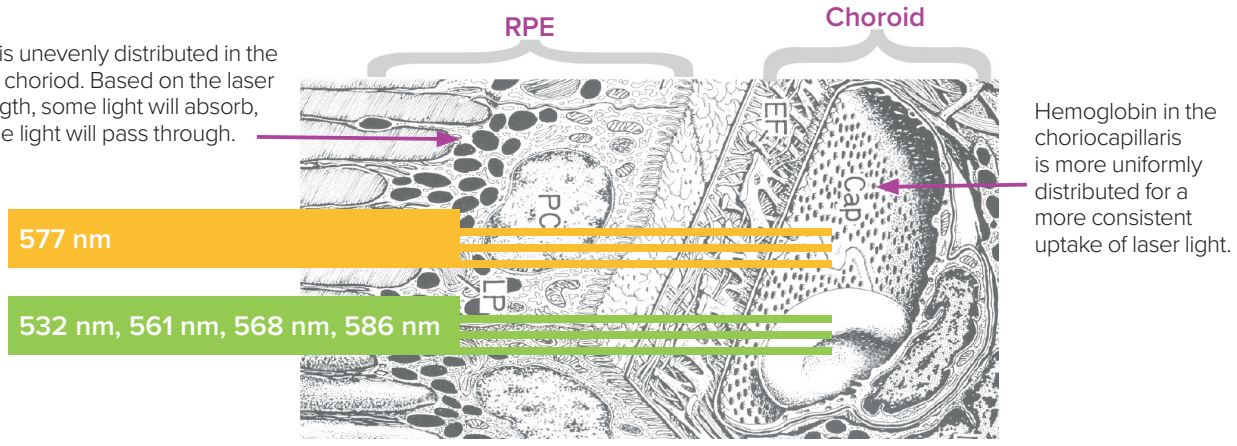


Figure 1

Figure 2

Melanin is unevenly distributed in the RPE and choriod. Based on the laser wavelength, some light will absorb, and some light will pass through.



Hemoglobin in the choriocapillaris is more uniformly distributed for a more consistent uptake of laser light.

The lower absorption and increased transmission of 577 nm through the non-uniform melanin granules of the RPE is more than compensated by the higher absorption of 577 nm in the underlying more uniformly distributed hemoglobin-rich choriocapillaris.

1. L'Esperance FA Jr. Clinical photocoagulation with the organic dye laser. A preliminary communication. Arch Ophthalmol 1985;103(9):1312-6.
2. Mainster MA. Wavelength selection in macular photocoagulation. Tissue optics, thermal effects, and laser systems. Ophthalmology 1986;93(7):952-8
3. Castillejos-Rios D, Devenyl R, Moffat K, Yu E. Dye yellow vs argon green laser in panretinal photocoagulation for proliferative diabetic retinopathy: A comparison of minimum power requirements. Can J Ophthalmol 1992;27(5):243-244
4. Brooks HL, Jr., Eagle RC, Jr., Schroeder RP, Annesley WH, Shields JA, Augsburger JJ. Clinicopathologic study of organic dye. Laser in the human fundus. Ophthalmology 1989;96(6):822-34.

Specifications

	Iridex 532® Laser	Iridex 577® Laser
Wavelength	532 nm Green	577 nm Yellow
Weight	5.85 g (12.9 lb)	5.85 g (12.9 lb)
Dimensions	30 cm W x 30 cm D x 17 cm H (11.8 in W x 11.8 in D x 6.7 in H)	30 cm W x 30 cm D x 17 cm H (11.8 in W x 11.8 in D x 6.7 in H)
Connector Type	RFID | Resistor	RFID | Resistor
Electrical	~100–240 VAC, ~.50/60 Hz, <3 A	~100–240 VAC, ~.50/60 Hz, <3 A
Cooling	Air/TEC cooled	Air/TEC cooled
Operating Temperature Conditions	10° C to 35° C (50° F to 95° F)	10° C to 35° C (50° F to 95° F)
Transport & Storage Temperature Conditions	-20° C to 55° C (-4° F to 131° F), 500 hPa to 1060 hPa	-20° C to 55° C (-4° F to 131° F), 500 hPa to 1060 hPa
Relative Humidity	20% to 80%	20% to 80%
Exposure Duration	CW-Pulse™: 10 ms – 3000 ms or CW to 60 seconds	CW-Pulse™: 10 ms – 3000 ms or CW to 60 seconds
Exposure Interval	CW-Pulse: 10 ms – 3000 ms or single pulse	CW-Pulse: 10 ms – 3000 ms or single pulse
MicroPulse® Duration	MicroPulse: 0.05 – 1.00 ms	MicroPulse: 0.05 – 1.00 ms
MicroPulse Interval	MicroPulse: 1.00 – 10.00 ms	MicroPulse: 1.00 – 10.00 ms
Aiming Beam	635 nm laser diode. User-adjustable; < 1 mW maximum	635 nm laser diode. User-adjustable; <1 mW maximum
Delivery Device Power Output	TxCell™ 0–2000 mW SLA: 0–2000 mW LIO: 0–2000 mW EndoProbe®: 0–2000 mW OtoProbe™: 0–2500 mW	TxCell™ 0–2000 mW SLA: 0–2000 mW LIO: 0–2000 mW EndoProbe®: 0–2000 mW

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Complies with 21 CFR 1040.10 and 1040.11 except for cnformance with IEC 60825-1 Ed. 3 and IEC 60601-2-22 Ed.3.1, as described in Laser Notice no. dated May 8, 2019.

ETL CLASSIFIED
Intertek
5020128

Conforms To AAMI STD ES60601-1 & IEC STDS 60601-2-22, 60601-1-6, 62366, 60825-1 & 62304
Certified To CSA STD C22.2 Nos. 60601-1, 60601-1-6 & 60601-2-22
Patent:http://iridex.com/patents.aspx

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