



# IRIDEX

## IRIDEX 810nm Infrared Solid-State Laser Family

### Innovative Combination of Power and Versatility

- Multifunctionality to perform retinal photocoagulation and glaucoma procedures
- Three different laser energy modalities: CW-Pulse™, Long-Pulse™ and MicroPulse®\*

### Optional Accessories

- **FiberCheck™ Slit Lamp Adapter\*\***
  - Unique slit lamp adapter verifies the laser is operating to specification before treatment
- **Remote Control**
  - Compact design for convenient access to the laser adjustment
- **Wireless Footswitch\*\***
  - No cord, no clutter, no limitations
  - Available with power-adjust to control laser actuation and power settings



IQ 810™



OcuLight® SL



OcuLight® SLx

\*MicroPulse available on IQ 810 and SLx only

\*\*Available for the IQ 810 only

# 810 nm Multifunctionality

## Multiple Therapeutic Indications

The IRIDEX 810 nm ophthalmic laser systems were designed to offer a vast variety of treatment modalities for a wide selection of indications. The IQ 810™, OcuLight® SL, and OcuLight SLx are indicated for retinal photocoagulation, laser trabeculoplasty, transscleral cyclophotocoagulation, transscleral retinal photocoagulation, iridotomy, and other diode laser treatments.

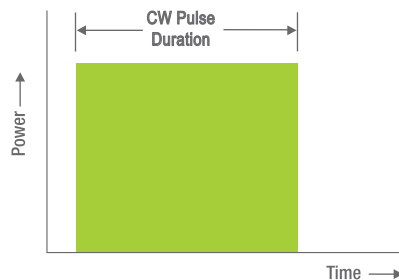
## Indications for Use

Indication	Procedure	Delivery Device
Glaucoma <ul style="list-style-type: none"> <li>– Primary Open Angle</li> <li>– Closed Angle</li> <li>– Refractory Glaucoma</li> </ul>	Laser Trabeculoplasty; Iridotomy; Transscleral Cyclophotocoagulation (TSCPC)	Slit Lamp Adapters (SLA); G-Probe™
Diabetic Retinopathy <ul style="list-style-type: none"> <li>– Nonproliferative Retinopathy</li> <li>– Macular Edema</li> <li>– Proliferative Retinopathy</li> </ul>	Panretinal Photocoagulation (PRP); Focal and Grid Laser Treatments	SLA; EndoProbe®; Laser Indirect Ophthalmoscope (LIO)
Retinal Tears, Detachments, and Holes	Transscleral Retinal Photocoagulation (TSRPC); Focal and Grid Laser Treatments	SLA; DioPexy™; LIO; EndoProbe
Lattice Degeneration	PRP; Focal and Grid Laser Treatments	EndoProbe; SLA; LIO
Age-Related Macular Degeneration (AMD) with Choroidal Neovascularization (CNV)	Focal and Grid Laser Treatments	SLA; LIO
Intra-Ocular Tumors <ul style="list-style-type: none"> <li>– Choroidal Hemangioma</li> <li>– Choroidal Melanoma</li> <li>– Retinoblastoma</li> </ul>	Focal and Grid Laser Treatments	SLA; LIO; Operating Microscope Adapter (OMA)
Retinopathy of Prematurity	PRP; TSRPC; Focal and Grid Laser Treatments	DioPexy; LIO; LIO-LS
Sub-Retinal (choroidal) Neovascularization	Focal and Grid Laser Treatments	SLA; LIO
Central and Branch Retinal Vein Occlusion	PRP; Focal and Grid Laser Treatments	EndoProbe; SLA; LIO

# Multiple Modes for Multiple Applications

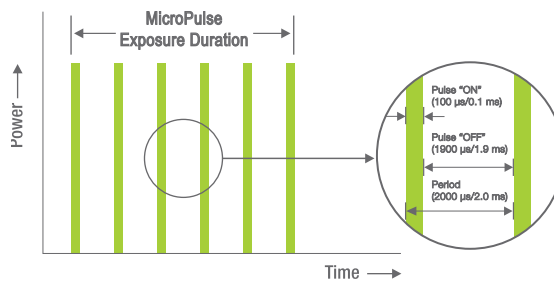
## CW-Pulse™ (Continuous-Wave) Mode

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\*

With MicroPulse technology, the steady CW emission is “chopped” into a train of shorter laser pulses, whose “duration” (“ON” time) and “interval” (“OFF” time) are adjustable by the surgeon. A shorter MicroPulse “duration” limits the time for the laser-induced heat to spread to adjacent tissues, thus providing more precise confinement of energy delivered. A longer “interval” between each MicroPulse provides additional time for tissue to cool. The “ON” time during the total period of “ON” + “OFF” time is referred to as a Duty Cycle. Duty cycles are represented as a percentage, and are adjustable from .4% to 50%, or presets of 5%, 10%, and 15%.



## MicroPulse Technology

- MicroPulse laser delivery confines heat to target area
- Limits thermal rise in target tissue below the threshold of conventional photocoagulation
- Broad clinical utility

\*MicroPulse available on IQ 810 and SLx only

# IRIDEX<sup>®</sup> Infrared Laser Family

## Specifications

	OcuLight <sup>®</sup> SL	OcuLight SLx	IQ 810 <sup>™</sup>
<b>Wavelength:</b>	810 nm		
<b>Weight:</b>	6.3 kg (14.0 lb)		5.0 kg (11.0 lb)
<b>Dimensions:</b>	30 cm x 30 cm x 10 cm (12 in W x 12 in D x 4 in H)		30.5 cm x 30.5 cm x 17.8 cm (12 in W x 12 in D x 7 in H)
<b>Connector Type:</b>	Resistor		
<b>Electrical:</b>	100–240 VAC, 50/60 Hz		
<b>Cooling:</b>	Air cooled		
<b>Exposure Duration:</b>	CW-Pulse <sup>™</sup> : 10–9000 ms in 29 increments LongPulse <sup>™</sup> : 10 s- 30 min in 26 increments		
<b>Exposure Interval:</b>	CW-Pulse: 50–1000 ms in 11 increments and Single Pulse		
<b>MicroPulse<sup>®</sup> Duration:</b>	N/A	MicroPulse: 0.1–1.0 ms	MicroPulse: 0.025-1.0 ms in 22 increments
<b>MicroPulse Interval:</b>	N/A	MicroPulse: 1.0–10.0 ms	MicroPulse: 1.0-9.5 ms in 26 increments
<b>Aiming Laser:</b>	Diode laser, 650 nm nominal		
<b>Delivery Device Power Output:</b>	SLA: 0–1300 mW LIO: 0–1500 mW LIO-LS*: 0-1500 mW EndoProbe <sup>®</sup> : 0–1500 mW G-Probe <sup>™</sup> : 0-2000 mW DioPexy <sup>™</sup> : 0-1800 mW OMA <sup>**</sup> : 0-1300 mW	SLA: 0–2000 mW LIO: 0–2000 mW LIO-LS: 0-2000 mW EndoProbe: 0–2000 mW G-Probe: 0-3000 mW DioPexy: 0-2000 mW OMA: 0-2000 mW	SLA: 0–2000 mW LIO: 0–2000 mW LIO-LS: 0-2000 mW EndoProbe: 0–2000 mW G-Probe: 0-3000 mW DioPexy: 0-2000 mW OMA: 0-2000 mW

\*Factory installed option

\*\*Optional

Specifications are subject to change without notice. IRIDEX, the IRIDEX logo, MicroPulse, OcuLight and EndoProbe are registered trademarks and IQ 810, FiberCheck, G-Probe, DioPexy, LongPulse, and CW-Pulse are trademarks of IRIDEX Corporation. All other trademarks are the property of their respective owners.

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; 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.

Other U.S. and international patents pending.

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