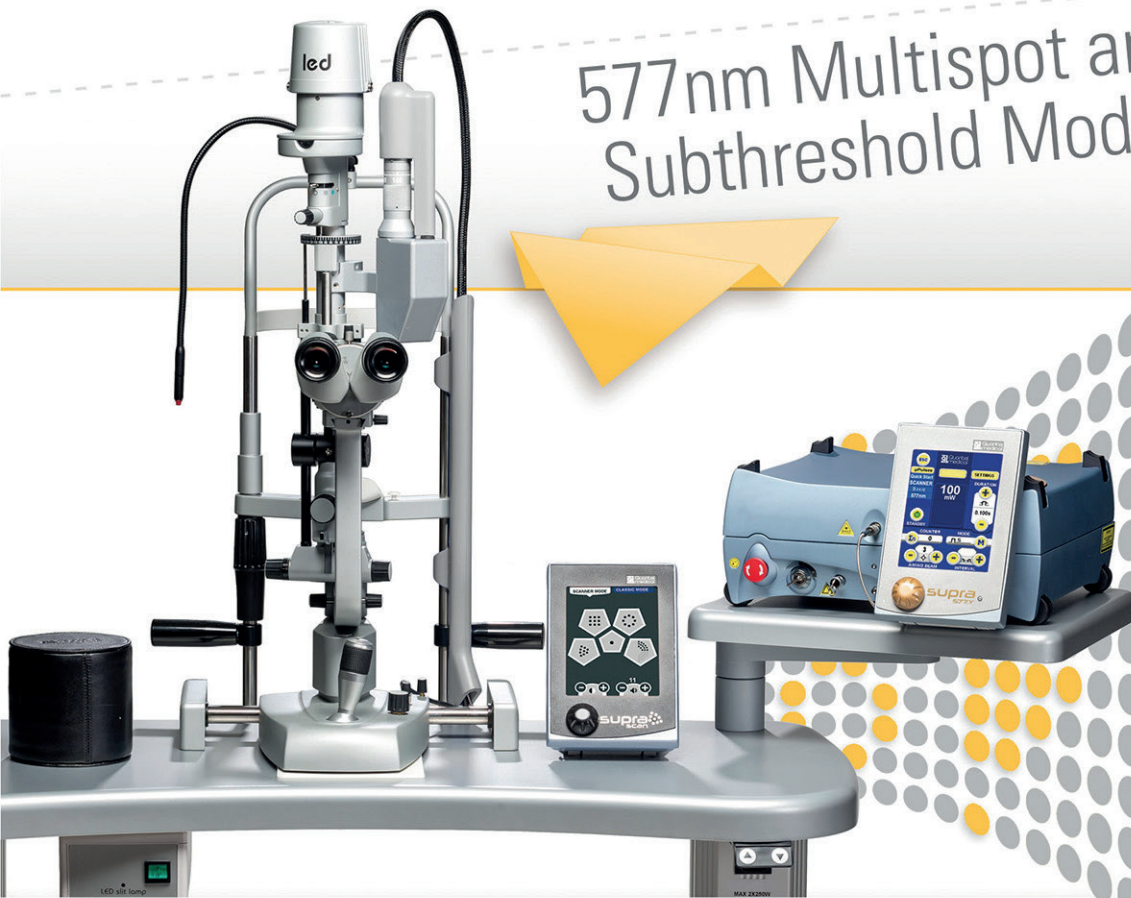


FUNCTION

RESUME®

supraTM scan

577nm Multispot and
Subthreshold Modes



Peripheral and Macular Photocoagulation



SUPRATM scan

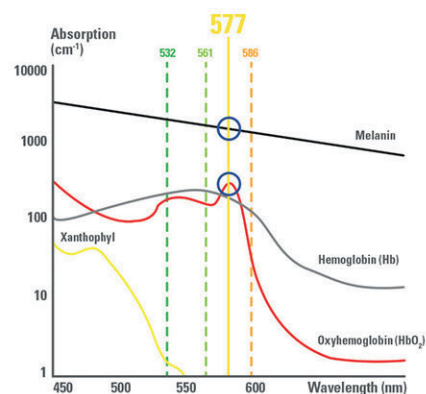
Supra Scan 577 is a 577nm yellow photocoagulator compatible with Haag Streit type slit lamps. Versatile, it offers a large choice of treatment settings well adapted to the treatment of macular and peripheral retinal pathologies.

Supra Scan 577: Yellow, Multispot and Subthreshold Modes

● Yellow Laser – 577nm Wavelength:

Presented as the most versatile wavelength in the scientific literature, the 577nm wavelength benefits from all the following features:

- Excellent combined absorption by both melanin and oxyhemoglobin (peak absorption of oxyhemoglobin) [1,2]
- Very little absorption by macular xanthophylls pigments [1,2]
- Excellent penetration through cataracts and hazy media [1,2]



● Multispot Mode:

Characterized by the use of short pulse durations (10-20ms) and by the emission of customizable patterns, the multispot treatment mode offers many advantages over classical single spot treatments:

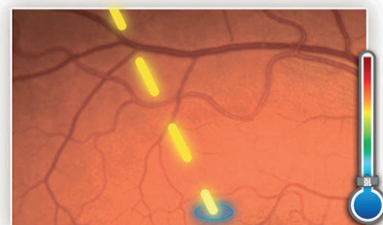
- Less heat diffusion to the retina and choroid, less damage to the retinal nerve fiber layer [3,4]
- Comfortable treatment better tolerated by patients [5]
- Extremely fast treatment (full PRP in 1 session) [6]

Supra Scan 577 features 5 customizable patterns:
Single spot – Squares – Circles – Triple arcs – Macular grid

PATTERN SELECTION TYPE	DELIVERED LASER SPOTS
SINGLE SPOT	•
SQUARES	••• •••
CIRCLES	••• •••
TRIPLE ARCS	••• ••• •••
MACULAR GRID	••• ••• •••

● Subthreshold Mode:

Composed of a train of extremely short microsecond pulses, this subthreshold treatment mode (non-visible laser impacts) is a tissue sparing treatment mode avoiding scarring [7,8] while treating Diabetic Macular Edema [7] and Central Serous Chorioretinopathy [8].



Supra Scan 577: Technology

● Integrated Laser Adapter or Removable:

In order to address the specific needs of each configuration, Supra Scan 577 is available in 2 versions:

INTEGRATED VERSION



REMOVABLE VERSION



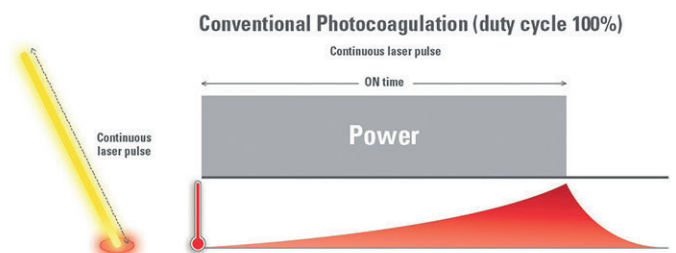
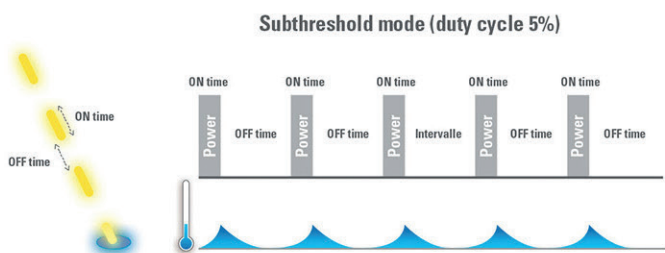
- An integrated version intended for fixed configurations:
 - Dedicated laser adapter integrated into the Quantel Medical Slit Lamp
 - Continuously variable parfocal zoom (from 50 to 400µm)

- A removable version intended for transportable configurations:
 - Removable laser adapter compatible with Quantel Medical slit lamp, Haag Streit BM/BQ 900 and clones
 - Continuously variable parfocal zoom (from 50 to 500µm)

● Subthreshold Mode:

In addition to monospot and multispot delivery modes, Supra Scan 577 features the Subthreshold mode.

The use of this subthreshold treatment mode converts each laser shot into a “pulse envelope” composed of a customizable train of short pulses, allowing the operator to fully adjust the pulse duration (On Time) and interval (Off Time). This finely-tuned control of the laser treatment settings ensures a precise management of the thermal effect on the targeted tissues.

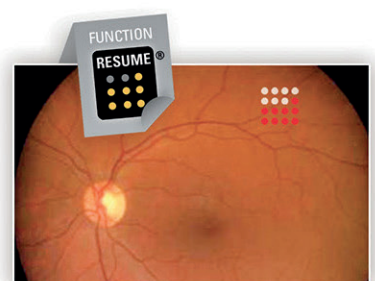


● Resume® Function:

Supra Scan 577 and its “RESUME®” function offer more flexibility to the operator in the implementation of the Multispot and the Subthreshold treatment modes.

During a Multispot treatment procedure: in case of patient motion during the pattern delivery, the laser burst can be interrupted, the operator can reposition the aiming beam, and the pattern delivery can be resumed exactly where the treatment was paused (the previous shots are remembered).

During a Subthreshold treatment procedure: in order to optimize and simplify the non-visible treatment implementation, the Subthreshold emission mode can be combined with the multispot mode and delivered semi-automatically in several steps



Supra Scan 577: Ease of Use



Control laser settings with the touch screen or hands-free with the foot-switch



Control patterns with the dedicated touch screen console and its analog knob

Supra Scan 577: Versatility

● Laser Delivery Systems:

OR microscope adapters compatible with:

- Zeiss type
- Leica type



Laser indirect ophthalmoscopes:

- Heine Omega 500 (integrated laser adapter)
- Keeler Vantage Plus (external laser adapter)



Laser probes:

- Straight : 20, 23, 25 Gauge
- Curved: 20 Gauge
- Flexible curved: 23, 25 Gauge
- Steerable: 23, 25 Gauge
- Illuminated: 23, 25 Gauge



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- 3- Jain A, Blumenkranz MS, Paulus Y et al. Effect of pulse duration on size and character of the lesion in retinal photocoagulation. *Arch Ophthalmol.* 2008; 126:78-85.
- 4- Yi-Ryeong Park, Donghyun Jee. Changes in Peripapillary Retinal Nerve Fiber Layer Thickness after Pattern Scanning Laser Photocoagulation in Patients with Diabetic Retinopathy. *Korean J Ophthalmol* 2014;28(3):220-225.
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- 7- Yoon Hyung Kwon, Dong Kyu Lee, Oh Woong Kwon The short-term efficacy of subthreshold micropulse yellow (577-nm) laser photocoagulation for diabetic macular edema. *Korean J Ophthalmol* 2014;28(5):379-385
- 8- Scholz P, Ersoy L, Boon CJF, Fauser S Subthreshold Micropulse Laser (577 nm). Treatment in Chronic Central Serous Chorioretinopathy. *Ophthalmologica* 2015 DOI: 10.1159/000439600



led

supra scan

QUANTUM MEDICAL
supra scan
SCANNER
100 mV
DURATION
0.100s
AMMO BEAM

QUANTUM MEDICAL
supra scan
SCANNER
CLASSIC MODE

supra scan

supra scan
+

SUPRATM scan

TECHNICAL SPECIFICATIONS



SUPRA 577.Y SPECIFICATIONS

Laser:	577 nm, Solid State Technology (OPSL)
Power at tissue up to:	2000 mW
Pulse duration:	10 ms to continuous
Monospot modes:	Single, Repeat, Painting, Continuous
Subthreshold mode:	Train of microsecond pulses
	Adjustable duty cycle: from 5% to 25%
Aiming beam:	635 – 650 nm
Size:	14.6 (H) x 33 (W) x 30.7 (D) cm 4.8" (H) x 10.8" (W) x 10" (D)
Weight:	10.5 kg – 23 lbs
Cooling:	By Peltier effect
Power requirements:	100 to 240 VAC, 350 VA, 50/60 Hz

DELIVERY SYSTEMS

Supra Scan - Multislot slit lamp adapter

Patterns:	Squares, Circles, Triple arc, Single Spot, Macular Grid Resume [®] Function
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Slit lamp compatibility:	Integrated laser adapter	Removable laser adapter
	Quantel Medical (CSO 990 5x)	Quantel Medical (CSO 990 5x), Haag Streit BM / BQ 900 and clones
Spot size:		
- Monospot mode	50 µm to 400 µm	50 µm to 500 µm
- Multislot mode	100 µm to 400 µm	100 µm to 500 µm

Laser indirect ophthalmoscopes:

Heine Omega 500 and Keeler Vantage Plus

Laser probes:

- Straight : 20, 23, 25 Gauge
- Curved: 20 Gauge
- Flexible curved: 23, 25 Gauge
- Steerable: 23, 25 Gauge
- Illuminated: 23, 25 Gauge

OR microscope adapters:

Zeiss and Leica types

AVAILABLE MODELS

- Supra Scan system with integrated laser adapter on Quantel Medical slit lamp
- Supra Scan system with removable laser adapter on Haag Streit slit lamp type
- Supra Scan system with removable laser adapter on Quantel Medical slit lamp

Specifications are subject to change without notice.
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