

NAVILAS[®] 577s
Make every spot count

The Navigated Retina Laser

All-digital | Effective | Comfortable



Navilas® 577s

All-digital retinal laser therapy

Navilas® is the first all-digital system for navigated focal and peripheral laser treatments. The key elements of laser therapy are effectively integrated into one smart solution.



Retina Navigation

Effective and comfortable treatment

Navilas® delivers precise treatment planning and comfortable performance for doctors and patients.



Comprehensive treatment

Plan your laser therapy based on color fundus and external diagnostic images to ensure comprehensive care.



Precision

Attain precision through the pre-positioning and stabilization of the laser beam on the retina, even in challenging treatment situations.



Comfort

Perform focal treatments optionally under infrared light and without a contact lens.



Intuitive use

Navigate intuitively with the joystick and a high-resolution touchscreen that concisely displays live images, treatment plans, and parameters.



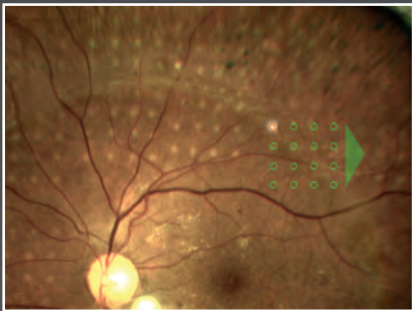
Speed

Treat the peripheral region faster than with conventional pattern scan lasers via the large field-of-view and assisted pattern placement.

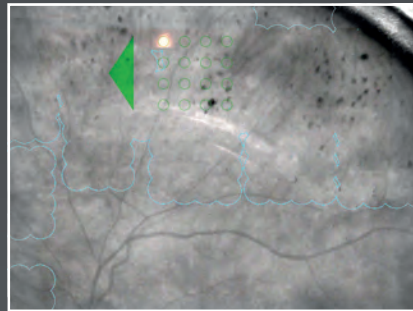
Ultra-Wide-Field PRP

Fast and complete PRP treatment

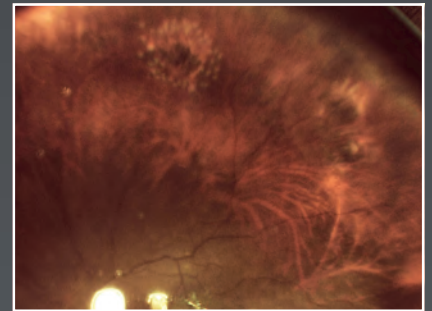
Navilas® simplifies and accelerates peripheral laser coagulation with flexible and automated pattern positioning via touchscreen and joystick.



PRP in color mode



PRP in infrared mode using auto advance



Laser retinopexy

Optimal overview

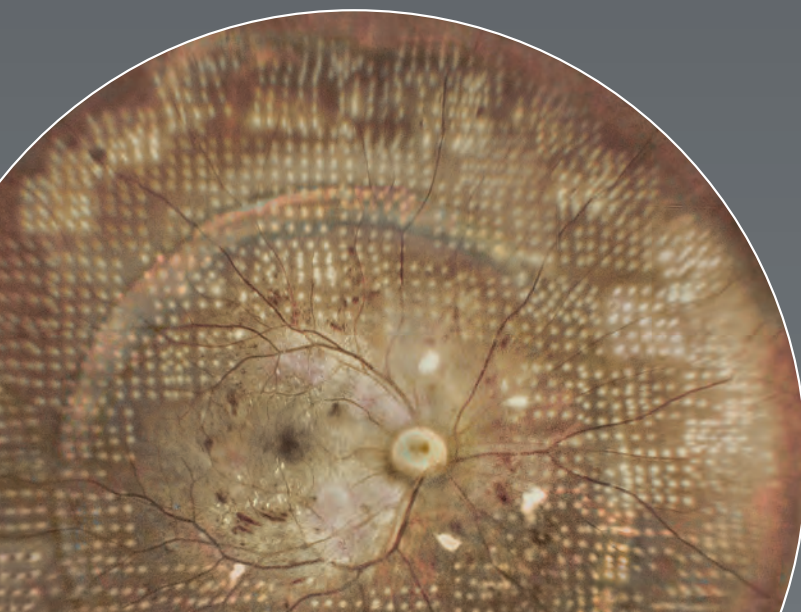
The Navilas® PRP optics provide a large field of view for rapid targeting of treatment locations in both PRP and laser retinopexy treatments.

Fast pattern placement

Patterns of up to 25 spots can be placed via touchscreen or joystick and rapidly delivered. Navilas® stabilizes the aiming beam and positions the pattern automatically on the next location.

Designed for patient comfort

To reduce glare and increase patient comfort, the infrared illumination with digital documentation function can be activated at any time.



External composite of
Navilas® PRP images

"I am very impressed with the new Navilas 577s PRP. To me as the physician it feels ergonomic and straightforward - the system literally lets me paint the peripheral retina with uniform spots in a very short amount of time. It was very well tolerated by the patients, with only topical anesthesia. Navilas now has an industry leading PRP tool to complement its incomparable focal laser capability."

David Brown, MD, Houston, Texas

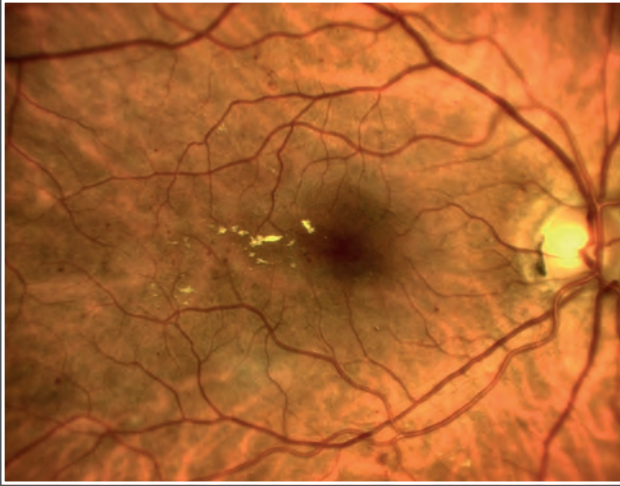


Focal laser treatment

Structured treatment workflow

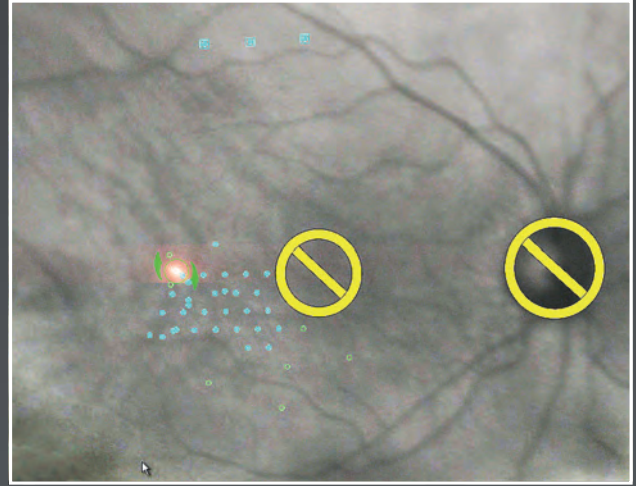
Navilas® uniquely provides retinal specialists with an all-digital treatment workflow, enabling precise, comprehensive care and bringing back confidence in laser therapy.





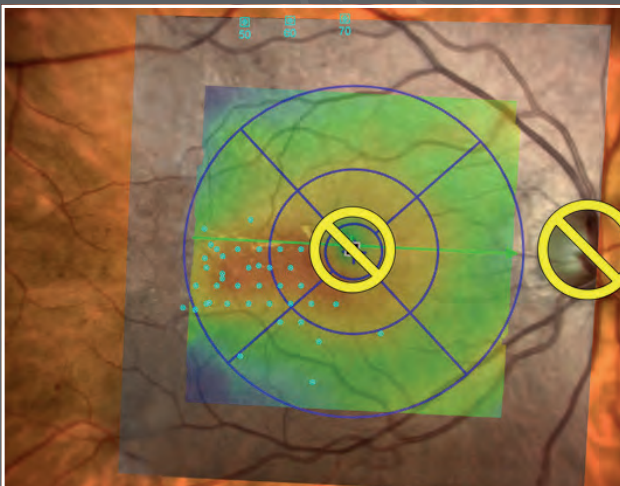
Digital fundus imaging

A high-resolution Navilas® color fundus image can be obtained at the touch of a button.



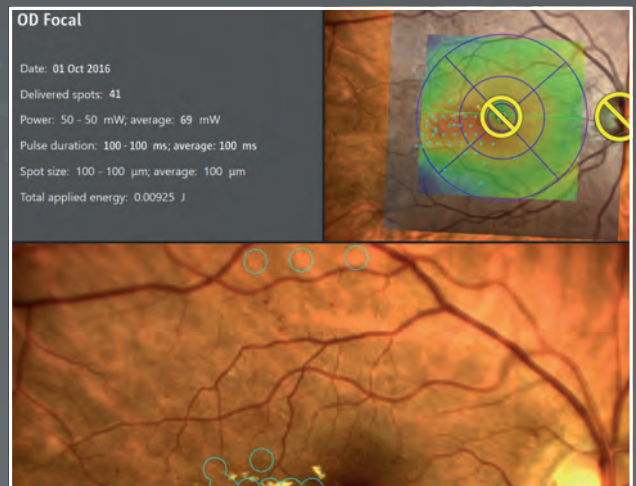
Target-assisted laser treatment

The physician's pre-defined treatment plan is automatically overlaid onto the live infrared image, while the Navilas pre-positions the aiming beam onto the treatment locations.



Digital treatment planning

Automated import of external diagnostic images and various plan elements provide for exact, indication-focused treatment planning.



Digital treatment report

Navilas® generates a transparent digital treatment report for storage and printing.

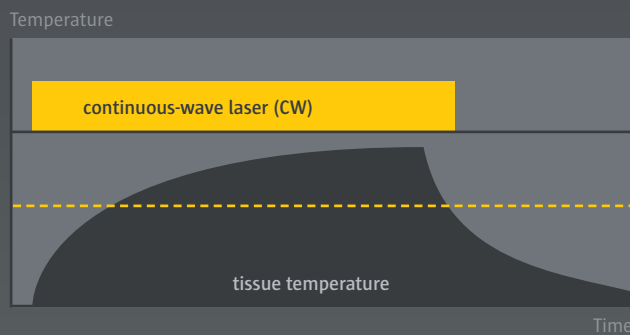
Navigated microsecond pulsing

Navigated microsecond pulsing treatment applies the advantages of precision and comfort to microsecond treatments.

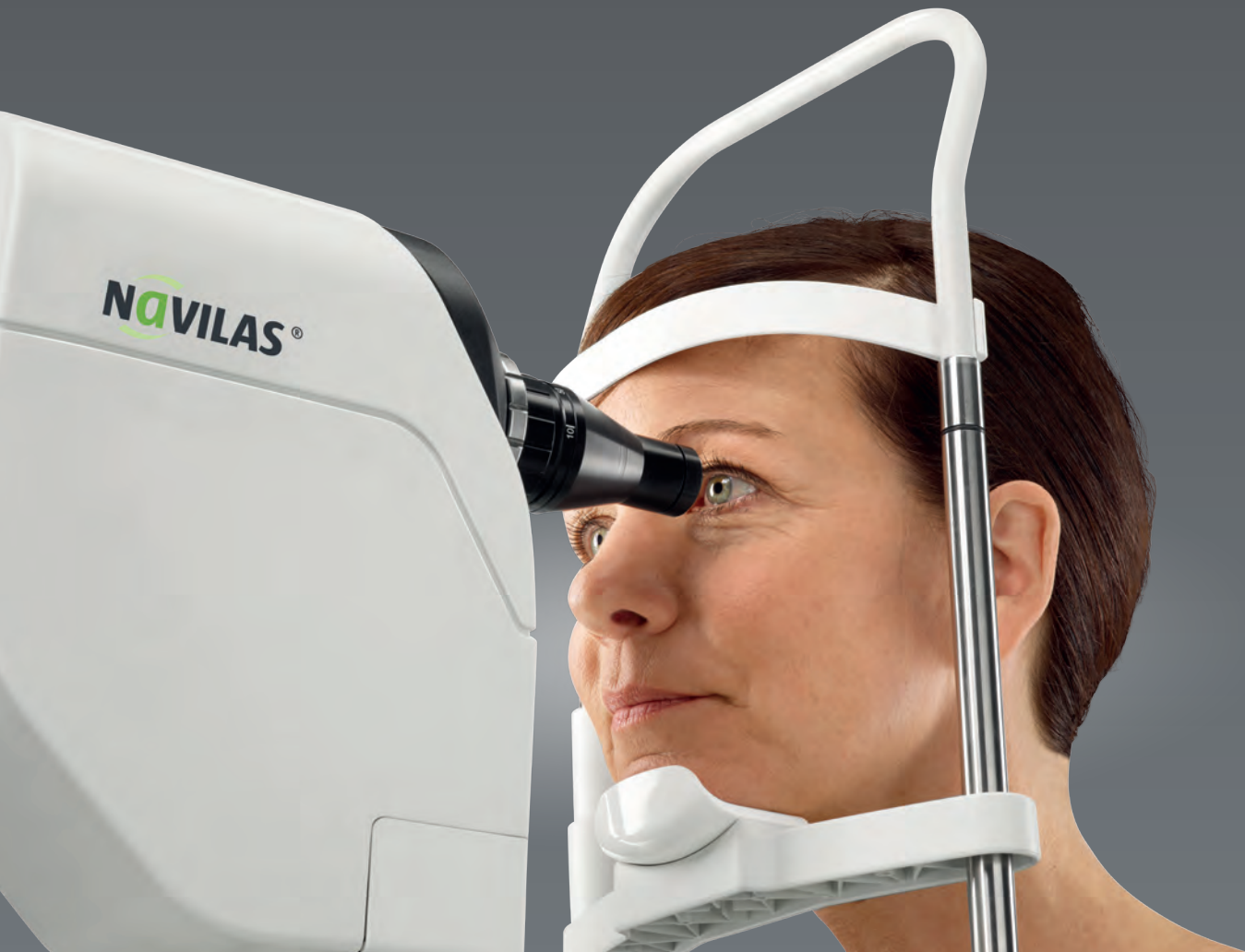
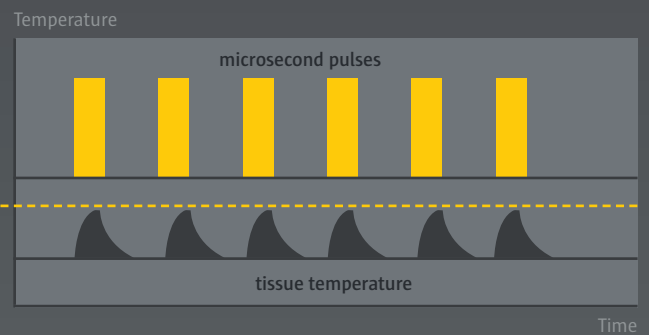
How it works

Laser energy is applied in a series of brief pulses in the range of 100–300 μ s with the aim of repeatedly heating retinal tissue. By balancing heating and cooling phases, the tissue temperature can be kept below the photocoagulation threshold.

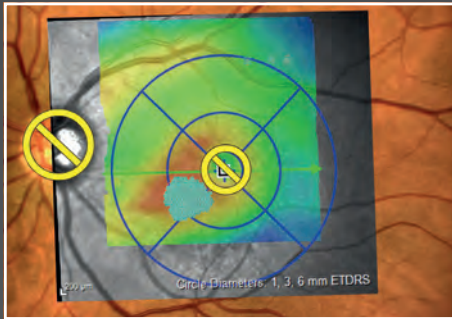
Laser coagulation with CW laser



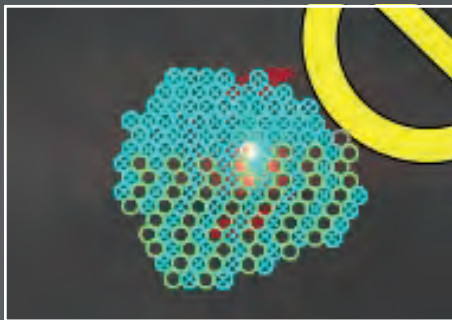
Microsecond pulsing treatment



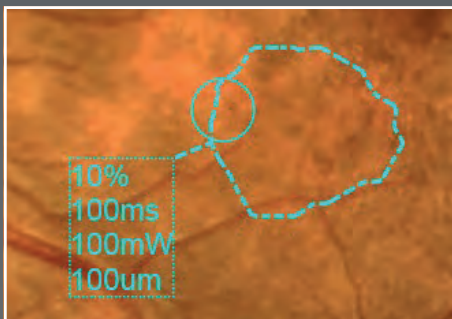
The unique, all-digital approach enables a predictable microsecond pulsing treatment.



Planning with image import



Target-assisted laser application



Comprehensive documentation

"Navilas is the first microsecond pulsed laser with the ability to reliably document the applied laser spots, which provides us with a valuable treatment alternative for our patients today and a reproducible method for continuing clinical advancement."

David Callanan, MD, Arlington, Texas

Smart design

Comfortable laser treatment

The unique ergonomics of Navilas® 577s provide treatment comfort for patient and doctor alike.





Contact-free focal treatment



Infrared illumination



Intuitive use



Smart controls



Navilas® Laser System 577s

Technical Specifications



Laser wavelength	577 nm (yellow)
Laser type	Optically Pumped Semiconductor (OPSL), Class IV
	Aiming beam: diode laser, 635 nm, < 1 mW, Class II
Laser power	50-2000 mW
Pulse duration	10–4000 ms
Microsecond pulsing	50-500 µs; 5, 10, 15 %, variable duty cycle
Digital fundus imaging	True-color and infrared (complemented by automated/manual image import)
Optics and field of view	Non-contact objective (focal): 50° static (+ dynamic extension)
	Contact objective (focal/peripheral): up to 165°/180° dynamic, analogous to contact lens used
Spot size on retina	Non-contact objective (focal): 50-500 µm
	Contact objective (focal/peripheral): 50-1000 µm (w/magnification)
Network access	RJ45 ethernet connector, sharing of images/data/treatment plans, network printing, remote service
Footprint (LxDxH)	44" x 28" x 50"-91" / 110 cm x 70 cm x 127-230 cm
Power supply	115-230 VAC, 50-60 Hz
Conformity	US FDA 510(k) clearance and CE conformity in accordance with the Medical Device Directive 93/42/EEC
Manufacturer	OD-OS GmbH, Teltow, Germany
The Navilas Laser System 577s is indicated for use:	In Retinal Photocoagulation for the treatment of Clinically Significant Diabetic Macular Edema (Focal or Grid Laser), Proliferative Diabetic Retinopathy (Panretinal Photocoagulation), Sub-retinal (Choroidal) Neovascularization (Focal Laser), Central and Branch Retinal Vein Occlusion (Scatter Laser Photocoagulation, Focal or Grid Laser), Lattice Degeneration, Retinal Tears and Detachments (Laser Retinopexy). For the imaging (capture, display, storage and manipulation) of the retina of the eye, including via color and infrared imaging; and for aiding in the diagnosis and treatment of ocular pathology in the posterior segment of the eye.

OD-OS Inc.

6201 Oak Canyon Drive, Suite 200
Irvine, CA 92618 USA
phone: +1 (949) 415 7258
e-mail: info@od-os.com

OD-OS GmbH

Warthestr. 21
14513 Teltow, Germany
phone: +49 (3328) 312 82-100
e-mail: info@od-os.com



www.od-os.com

©2017, OD-OS GmbH, all rights reserved. The Navilas® Laser System 577s is US FDA 510(k) cleared for use in the US and CE-marked in accordance with the Medical Device Directive 93/42/EEC. The product, features and procedures described in this document may not be approved/available in your country. Please contact our regional representative and/or OD-OS regarding availability and regulatory status in your country. Design and specifications are subject to change without notice as a result of ongoing technological advancement. OD-OS, the OD-OS logo, Navilas® and the Navilas® logo are trademarks, registered trademarks or service marks of OD-OS GmbH in Germany and/or other countries. In this document the Navilas® Laser System 577s may be referred to as Navilas® for legibility.