

**NAVILAS** *pro*

# Navilas<sup>®</sup> Laser System 577s Pro

Precise - faster - economically efficient



Navilas® 577s Pro

## Next generation beyond pattern laser

The Navilas® Laser System 577s Pro is your entry to all-digital laser therapy based on the unique benefits of its proprietary retina navigation technology. Our navigated laser is proven in practices and clinics worldwide across major retina applications and more.



*Your entry to retina navigation*

# Precise, faster and economically efficient

The Navilas® Laser System 577s Pro makes retinal laser treatments more efficient thanks to the high speed of laser application and optimized patient comfort. The next generation retina laser is available at competitive pricing while flexibly growing with your application needs.



## More comfortable for patients and doctors

Reduced pain of pattern application, optimized ergonomics and enhanced working distance between patient and doctor



## Faster and more efficient

44% faster application of laser spots, better patient cooperation and efficient use of team resources



## More precise and reliable

Pre-planning, retina navigation and caution zones for enhanced quality assurance of treatments



## Your affordable path to the nextgen retina laser

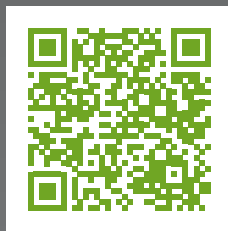
The all-digital Navilas® 577s Pro is the next generation beyond pattern laser available at competitive pricing and growing with your application needs

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*"Navigation continues to transform surgical interventions into safer, more standardized and more predictable procedures with finally better outcomes for patients."*

Dr. Igor Kozak, Moorfields Eye Hospital Abu Dhabi, United Arab Emirates

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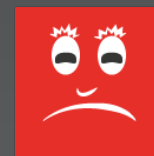
Visit Navilas® Pro website  
[www.od-os.com/navilas-laser-system-577s-pro](http://www.od-os.com/navilas-laser-system-577s-pro)

*Reduced pain experience*

## More comfortable for patients and doctors

Navilas® Pro makes focal and peripheral laser treatments more comfortable. Patients report less pain experience with navigated application of pattern which supports better compliance and high patient satisfaction ratings.

0 1 2 3 4 5 6 7 8 9 10



### Navilas® 577s Navigated Laser:

Painscore : VAS of  $2.4 \pm 1.6$   
Time :  $5.2 \pm 0.8$  min

### Conventional 577nm Pattern Laser:

Painscore : VAS of  $7.1 \pm 2.0$   
Time :  $6.6 \pm 1.1$  min

Amoroso F, Pedinielli A, Astroz P, et al. Comparison of pain experience and time required for pre-planned navigated peripheral laser versus conventional multispot laser in the treatment of diabetic retinopathy. Acta Diabetol. November 2019.

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*„It is most likely that the application of each spot with a short break—as it is in navigated laser—leads to a “restoration” of retinal tissue reducing the pain between the impacts.”*

Dr. F. Amoroso, CHI de Créteil, France

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## Perfect ergonomics and larger working distance

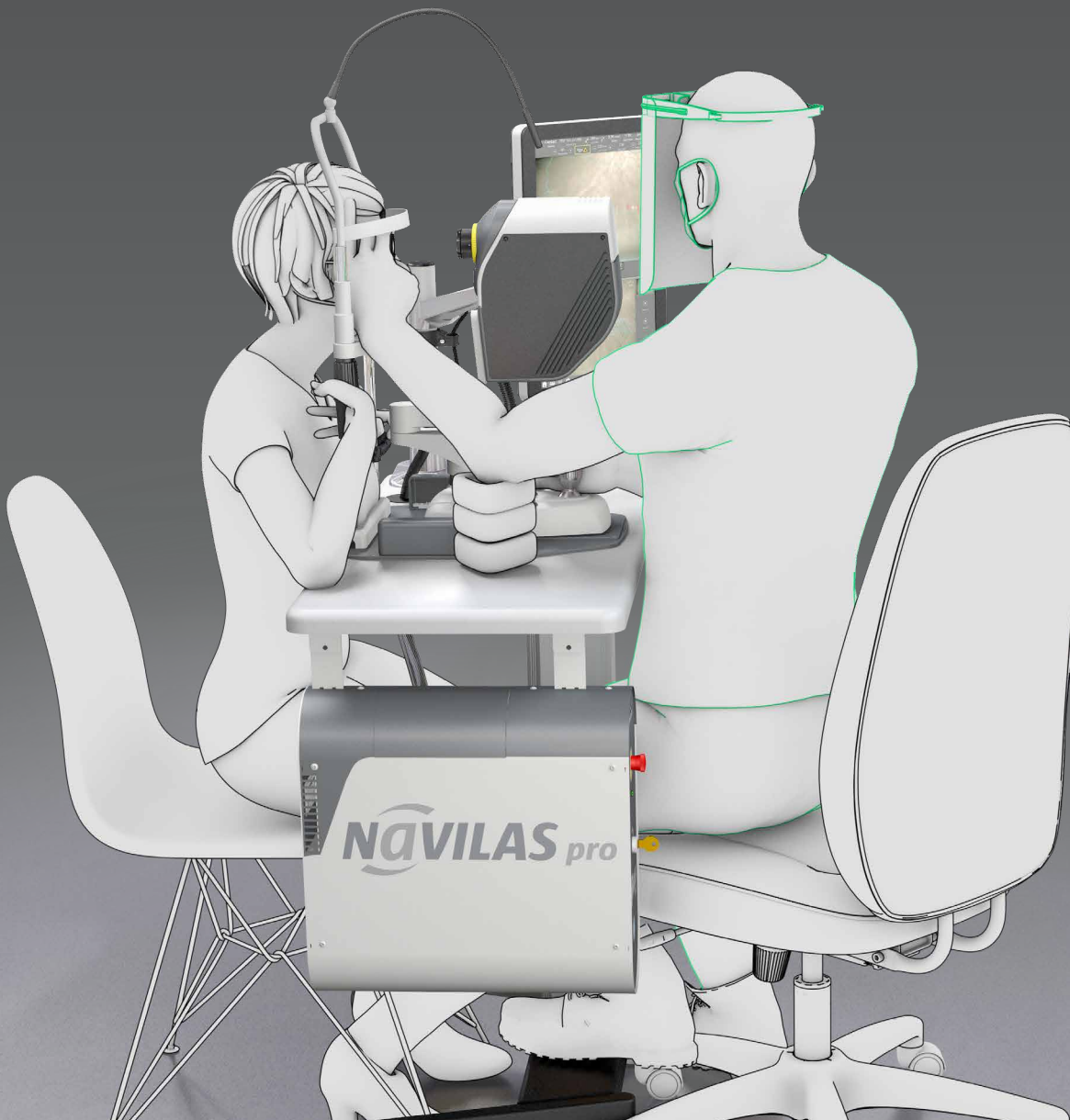
When performing treatments with Navilas® doctors benefit from an upright and variable sitting position with no need to bend the head forwards. The slightly rotated view towards the monitor leads to a larger working distance between doctor and patient. For best hygiene compliance, treating physicians may use their personal safety equipment.

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*"The screen-based treatment is ergonomically comfortable for the doctor and also allows for better interaction with your patients and students. Our field has about a 30% rate of neck and musculoskeletal complications over the course of our careers."*

Dr. Robin Ross, Global Retina Institute, Arizona, USA

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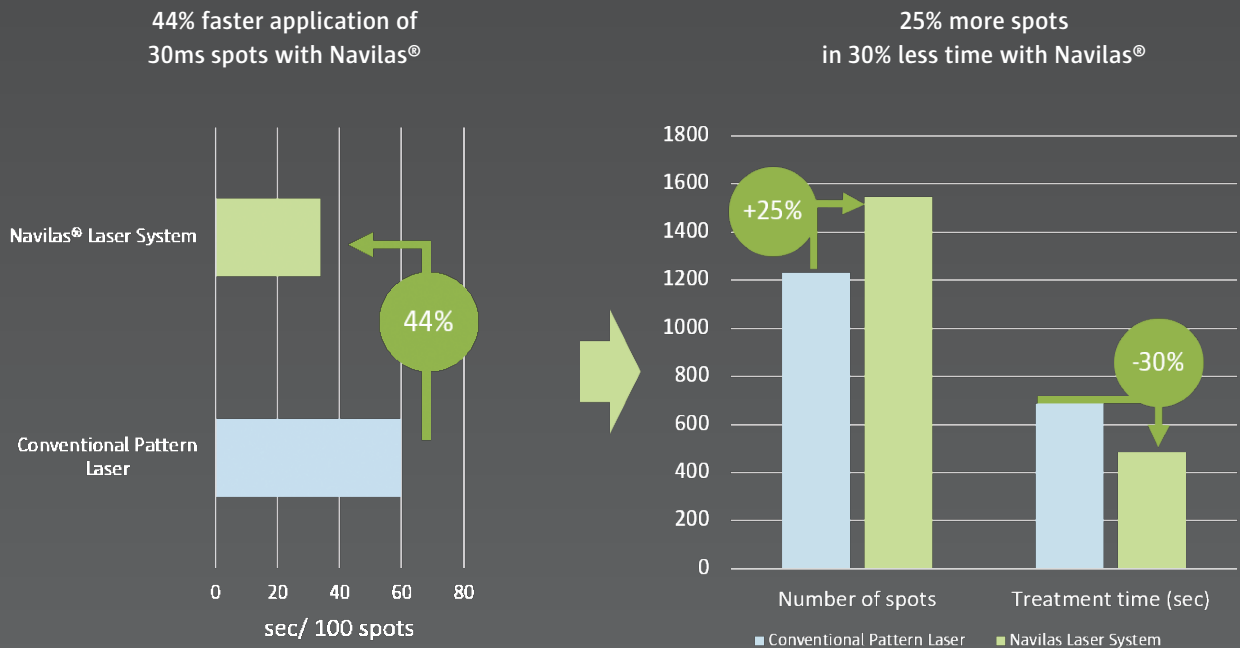




Higher patient throughput

## Faster and more efficient

Faster application of laser spots, better patient cooperation and efficient use of team resources contribute to higher efficiency of laser treatments.



Chhablani J et al Comparison of conventional pattern and novel navigated panretinal photocoagulation in proliferative diabetic retinopathy. Invest Ophthalmol Vis Sci. 2014 May 1;55(6):3432-8. doi: 10.1167/iovs.14-13936. PubMed PMID: 24787564.

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*"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."*

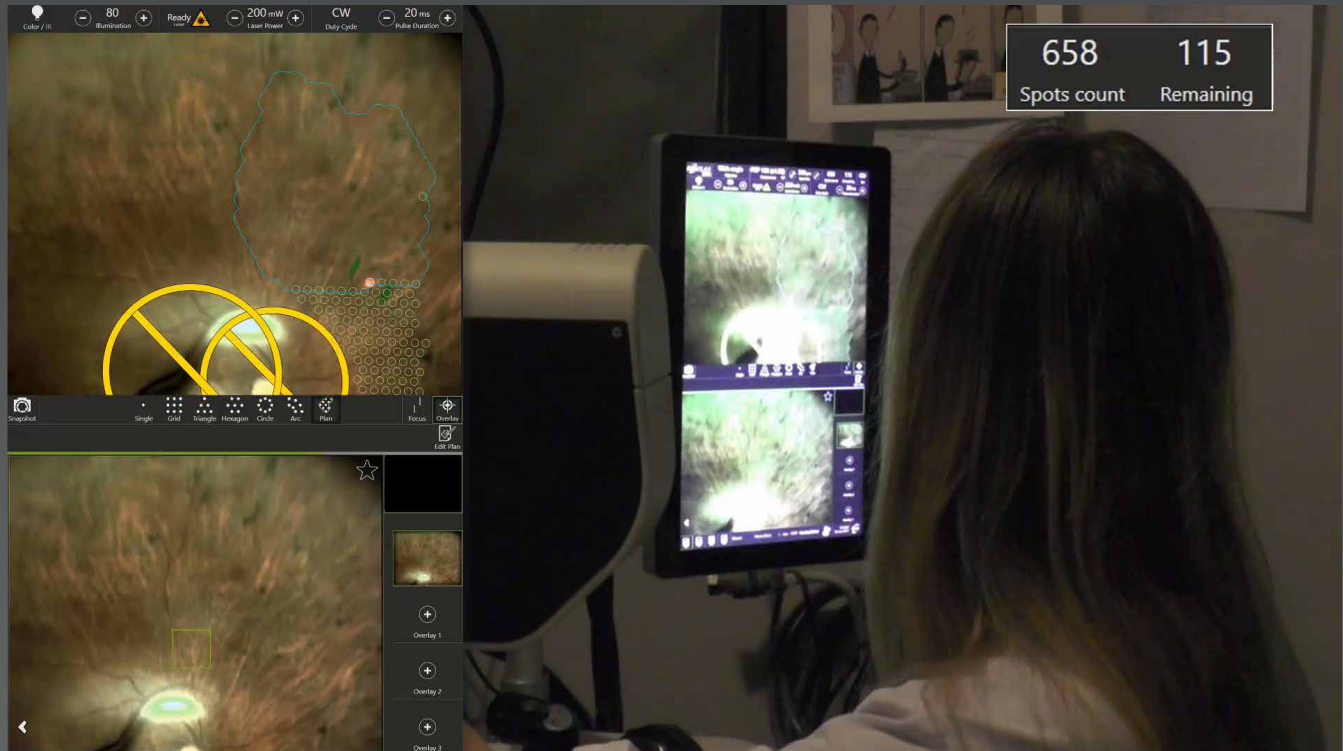
David Brown, MD, Houston, Texas, USA

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Enhanced quality assurance

# More precise and reliable

Navilas® is the only retinal laser on the market with eye tracking and caution zones for precise targeting, high consistency and reliability.



Liesfeld, Ben et al: Navigating Comfortably across the Retina; World Congress on Medical Physics and Biomedical Engineering, 2009



Watch treatment videos  
[www.od-os.com/cases](http://www.od-os.com/cases)

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*"Navilas provides all the digital functionality and safety to explore the optimal treatment strategies in a range of retinal indications. It is really is the tool we were dreaming for."*

Prof. Eric Souied, CHI de Créteil, France

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*Flexible upgrade packages*

# Affordable path to the nextgen laser

Navilas® 577s Pro flexibly grows with your application needs. To determine the best configuration of your navigated laser system and to find out about annual licensing options, please contact the OD-OS Navilas® team and our global partners.

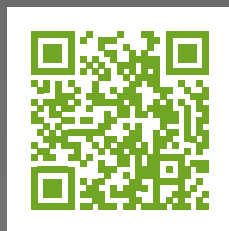


+ Advanced Comfort

+ Advanced Integration

+ Advanced Reporting

+ Advanced Teaching



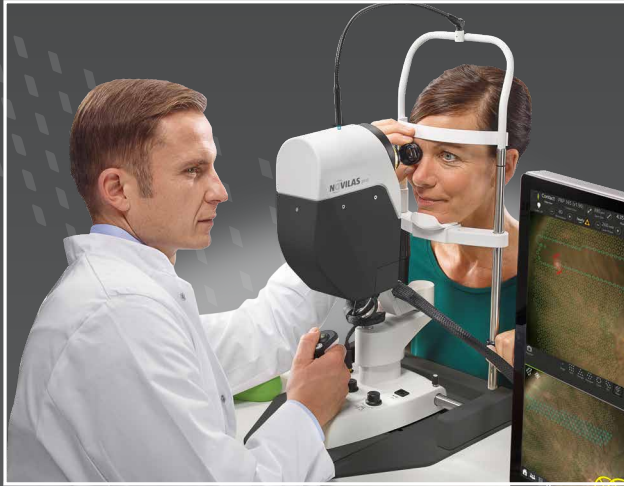
[www.od-os.com/contact](http://www.od-os.com/contact)



*A better way to do laser*

# Proven benefits of retina navigation

Navilas® Pro provides retinal specialists with an all-digital workflow for the efficient implementation of common retinal laser treatments.



## Familiar, fast operation with contact lens

Standard contact lenses are compatible with Navilas® Pro for intuitive, computer-guided treatments.



## Full screen fundus image

A high-resolution Navilas® color fundus image provides better overview during treatment.



## Precise targeting and caution zones

Caution zones and target-assisted laser application enable precise and easy-to-control treatments.



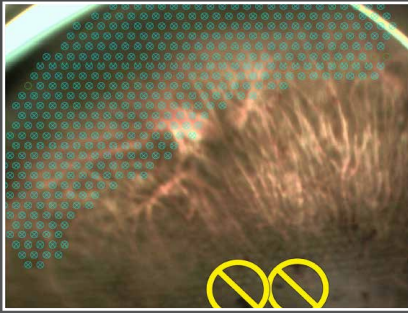
## Treatment parameters in a digital report

Navilas® Pro automatically generates a transparent, digital treatment report for storage and referring doctors.

Treatment modalities

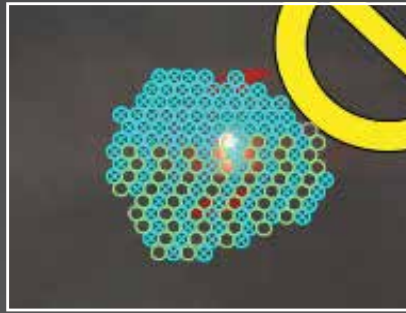
# Major retina applications and more

Navilas® Pro combines the advantages of pre-planned, tracked and therefore highly precise lasering with the established standards that you know from conventional pattern lasers.



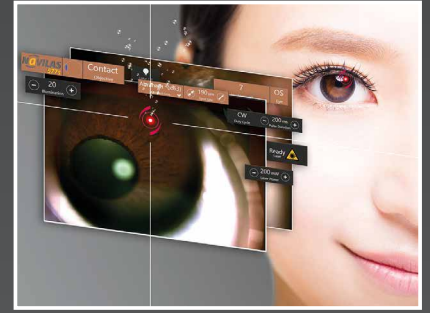
Fast PRP

Even distribution of spots in color mode



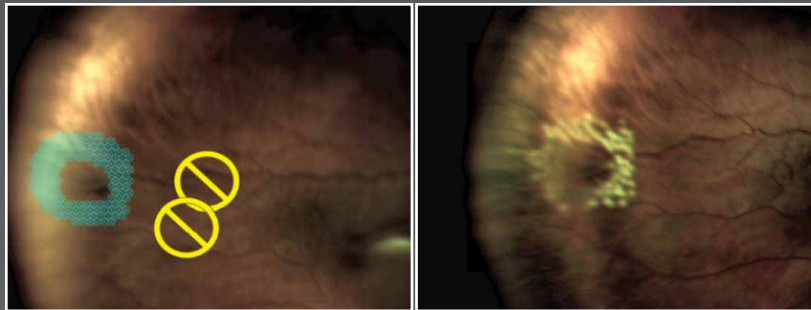
Microsecond pulsing

Every second spot delivery



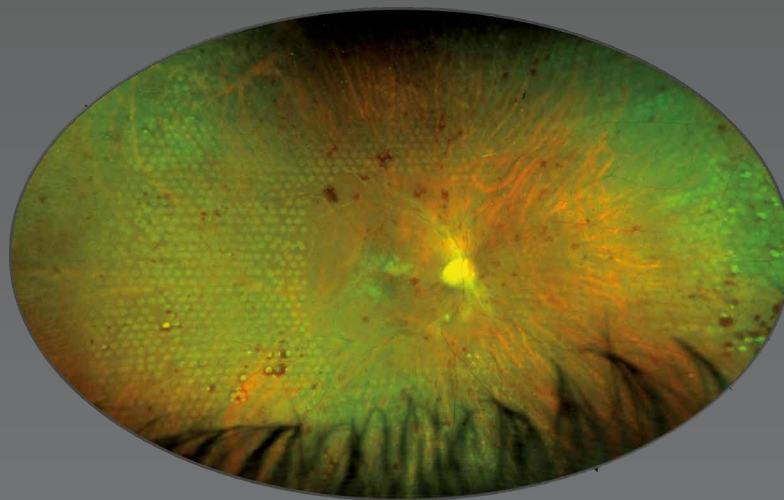
Anterior segment mode

Iridotomy and Laser Trabeculoplasty



Horseshoe tear

Far periphery



The Optos widefield image shows an equidistant distribution of laser spots after navigated laser treatment (source: Dr F. Amoroso, CHI de Créteil, FR)

## Retina navigation

# Advanced treatment

| Features  | Pattern laser | Navilas® 577s Pro |
|---|---------------|-------------------|
| <b>Basic treatment</b>  |               |                   |
| Yellow laser source 577nm   | ✓             | ✓                 |
| Retina focal and peripheral treatment mode  | ✓             | ✓                 |
| Anterior treatment mode (e.g. for LPI, MLT, PLT)  | ✓             | ✓                 |
| Contact glass treatment for PRP/Anterior/Focal  | ✓             | ✓                 |
| Single spot application   | ✓             | ✓                 |
| High speed ad-hoc pattern application without planning  | ✓             | ✓                 |
| <b>Advanced treatment</b>   |               |                   |
| Pattern PRP with equidistant spots + flexible configuration of pulse duration (e.g. to 100ms)     | –             | ✓                 |
| Microsecond pulse laser mode  | *             | ✓                 |
| Every second spot, confluent delivery for subthreshold treatments                                 | –             | ✓                 |
| Fundus imaging included in laser system   | –             | ✓                 |
| Import and display of external diagnostic images  | *             | ✓                 |
| Digital treatment planning based on fundus image incl. caution zones, e.g. for optical nerve head | –             | ✓                 |
| Tracking and mapping of retina on live image  | –             | ✓                 |
| Navigated treatment with plan overlay and target assistance                                       | –             | ✓                 |
| <b>Reporting</b>  |               |                   |
| Treatment report with parameters + print function   | *             | ✓                 |

*\*Available on some competitor systems      Regional configuration of the Navilas® 577s Pro may vary. Please inquire details with our local partners.*

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*"Navilas® 577s was a worthwhile investment also from the financial point of view as the system basically paid itself within the first year."*

Dr. Lars Freisberg, Tulsa Retina Consultants, USA

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## Navilas® Laser System 577s Pro

# Technical Specifications

|                          |   |
|--------------------------|---|
| Laser wavelength         | 577 nm (yellow) wavelength  |
| Laser type               | Optically Pumped Semiconductor Laser (OPSL), Class IV<br>Aiming beam: diode laser, 635 nm (red), < 1 mW, Class II   |
| Laser power              | 50-2000 mW (depending on spot size)   |
| Pulse duration           | 10-4000 ms  |
| Treatment modes          | Continuous Wave<br>Microsecond Pulsing: 50-500 µs; 5, 10, 15 %, variable duty cycle<br>Anterior applications: Iridotomy, MLT/PLT  |
| Digital fundus imaging   | True-color  |
| Optics and field of view | Contact objective (focal/peripheral): up to 165° / 180° dynamic, analogous to contact glass used  |
| Spot size on retina      | Contact objective (focal/peripheral): 50-1000 µm (w/magnification)  |
| Network access           | RJ45 ethernet connector, import of images, remote service   |
| Footprint (LxDxH)        | 110 cm x 70 cm x 127/160 cm / 44" x 28" x 50"-63"   |
| 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   |
| Resources                | Clinical experiences: <a href="http://www.od-os.com/experts">www.od-os.com/experts</a> ; Navigate App: <a href="http://www.od-os.com/navigate">www.od-os.com/navigate</a> |

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