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Psice ptix

novar Gen III



Psicoptix Technology™ Innovation that merges advanced optics and visual neuroscience to design lenses that not only correct vision but also optimize how the brain interprets images, providing a more precise, natural, and adaptive visual experience.

The difference between optical science and the real world of vision. Traditional optical science focuses on optical designs based on ideal mathematical principles, where lenses correct light refraction to focus it on the retina. However, in the real world, users face a dynamic and multidimensional environment. Eye movements, posture, varying light conditions, and brain-eye interactions all affect how images are perceived.

Psicoptix Technology[™] emerges to address these differences, understanding that visual perception depends not only on optical laws but also on how the brain interprets visual information.



Psicoptix Technology™

After two years of intensive research and development, Novar introduces Psicoptix Technology, which, for the first time, provides **access to visual perception maps** while allowing partial compensation of aberrations by considering the human brain's tolerance thresholds for astigmatism and blur.



Psicoptix Technology merges neuroscience and advanced optics to transform how we perceive the world.

Exclusive Novar technology that combines visual neuroscience principles to design lenses that optimize not only refractive correction but also visual perception.

It utilizes advanced algorithms that analyze how the brain perceives visual signals received by the eye from different points of the lens, creating an adaptive and natural optical focus.





Perceived power (subjective)

Measured power (objective)

As we have seen, this technology dynamically adjusts the lens geometry to optimize its optical quality, considering all the patient's viewing angles. As a result, peripheral aberrations are reduced, the visual field is expanded, and tolerance to suboptimal base curves is improved.

We revolutionize the visual experience by merging neuroscience and optical technology, creating innovations that transform perception into precision and comfort for a clearer future.

novar

Advantages of Psicoptix TechnologyTM

Minimizes peripheral aberrations by considering the human perception thresholds of aberrations. This reduces visual strain, enhances user comfort, and ensures clearer and more stable images from any viewing angle. Additionally, it allows the use of lower or suboptimal base curves, reducing thickness and improving lens aesthetics.





Users of traditional digital lenses often experience abrupt changes in focus when moving their eyes or head, as well as a "floating" sensation in images. They may also suffer from visual fatigue due to the difference between how the lenses correct images and how the brain interprets them.

These factors explain why, in some cases, patients with similar refractive powers and identical visual parameters struggle to adapt to lenses that other users adjust to successfully.



Benefits of Psicoptix in GEN III

Psicoptix[™] was the driving force behind the third generation of Novar lenses, standing out for its revolutionary approach that merges advanced optical technology with a deep understanding of visual neuroscience.

With Psicoptix Technology™, Novar reaffirms its commitment to optical excellence, raising industry standards and providing solutions that transform the way people see and perceive the world.





AI-GET TECHNOLOGY™

An innovative solution that revolutionizes the design and optimization of ophthalmic lenses through advanced artificial intelligence. This technology employs unsupervised optimization to redefine the mathematical structure of lenses, delivering superior optical performance with sharper images and wider visual fields. AI-GET also enhances coating formulas, improving lens durability and efficiency.

With AI-GET, Novar leads innovation in the optical industry, positioning itself as a benchmark in leveraging artificial intelligence to deliver precise, personalized, and superior-quality visual experiences.



CONTINUUM DESIGN TECHNOLOGY

CDT is an innovative design technology based on a modern mathematical model that enhances the manufacturing process of ophthalmic lenses. With this groundbreaking technology, NOVAR lenses take center stage in the global market's new era of technological advancement.



8K DEFINITION SURFACE - GEN II

CDT allows complete control over the entire lens surface, enabling the transmission of larger matrices of sagittas to the generator. As a result, higher optical resolution is achieved, optimizing visual fields.

This technology enables the production of lenses with up to 8 times more optical definition compared to other Freeform technologies. Similar to pixels in UHD digital displays, higher resolution on the ophthalmic surface translates into lenses with superior optical definition, delivering real benefits in terms of field of vision and image clarity.

WEAR FIT TECHNOLOGY

We have developed a system based on mathematical algorithms applied in the design and production process of lenses. This system involves meticulously inputting all characteristic data for each user, such as interpupillary distances, panoramic angle, vertex distance, and pantoscopic angle. The result of this equation is personalized and unique lenses tailored to the individual user.

ADAPTATIVE FOCUS TECHNOLOGY

With the exponential increase in digital media usage, focusing habits have emerged that challenge the adaptability of our eyes. In response to this, we have developed Adaptive Focus technology, which optimizes the intermediate and near visual fields—areas commonly used for reading digital and printed media. This aims to overcome any issues inherent in new

BLENDING TECHNOLOGY

Blending[™] Technology is an innovative approach used to optimize lens thickness. It involves seamlessly combining different materials or lens designs to achieve a more efficient distribution of thickness across the entire lens surface. By carefully blending materials or designs with varying refractive indices, the technology aims to reduce the overall lens thickness

reading habits.

while maintaining optimal visual performance.

SMART FIT TECHNOLOGY

Currently, thickness optimization calculations depend on the lens diameter or frame measurements combined with user data. However, SMART FIT incorporates advanced calculations that utilize the frame's 'tracing format'. In other words, it considers the geometric shape of the frame (all points forming the circumference - TRCFMT) so that, upon completing the edging process, thickness reduction of up to 40% can be achieved.

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AUTOMATIC CORRIDOR

When choosing a frame, for instance, it's crucial to consider its intrinsic characteristics and how it interacts with prescription lenses for presbyopia. To minimize errors, we've created a mathematical algorithm capable of determining the ideal corridor by considering the prescription, addition power, heights, pantoscopic angle, and vertex distance. This maximizes user comfort and versatility across all areas of vision.



TAKE YOUR LABORATORY TO THE **NEXT LEVEL!**

30-DAY FREE TRIAL

First

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For first-time progressive lens wearers. Distant Clarity Process is used to maximize far vision breadth and thus achieve a high-performance adaptation. These progressive lenses are ideal for people aged 40-45 years who begin to experience presbyopia.













Precisa

$\bullet \bullet \bigcirc$

Well-balanced progressive lens to perform different tasks. Balanced Process Technology provides superior vision at all distances. The perfect solution for wearers who are looking for progressives with a much wider, distortion-free reading area













Precisa Short

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Progressive lens with balanced design for small-sized frames. The perfect solution for wearers who are looking for progressives with a much wider, distortion-free reading area







DIMENSIONS



Addition range	▶ 0.50 / 4.00 D
Variable decentration	▶ Yes
Prism prescribed by design	▶ Yes
Automatic base curve selection	▶ Yes



Evolution

$\bullet \bullet \bullet$

Premium progressive lens designed with Continuum Design Technology & Smart Molding Process. Suitable for wearers who want the most advanced progressives to meet their vision needs. Progressives that provide wider and clearer fields of vision when focusing at nearby and distant objects.













Evolution Short

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The most evolved progressive lens for small frames. Premium progressive lens designed with Continuum Design Technology & Smart Molding Process. Suitable for wearers who want the most advanced progressives to meet their vision needs. Progressives that provide wider and clearer fields of vision when focusing at nearby and distant objects.











elife

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Premium progressives designed with Adaptative Focus technology to provide a wider reading and intermediate area. Progressives that meet the vision needs of people who are devoted to digital devices.









NOVAR Office is a tailor-made lens designed for intermediate and near vision. Suitable for people who need a wider area for near and intermediate vision without peripherical restraints for office work.









Single Vision

Spheric/toric monofocal with all the digital quality offered by Freeform.





Circular Fit	► Yes
Eliptical Fit	▶ Yes
Optimal Fit	▶ Yes
Smart Fit	► Yes
Blending Technology (+ / -)	► Yes
VISION	

Slim

Single vision lens design that automatically selects the optical zone and shifts it into the nasal zone to reduce edge thickness in high power plus and minus lenses, allowing wearers the freedom to experience our technologies in sizes and frame shapes they have never had access to before.



NEGATIVE

Without Blending Moderate Blending

Strong Blending



Thickness calculation technology:

Circular Fit	▶ Yes
Eliptical Fit	▶ Yes
Optimal Fit	▶ Yes





POSITIVE





Aspheric and atoric personalized monofocal which achieves a better visual quality and a higher perception of details by eliminating a great part of spherical aberrations. Consequently, an improvement on visual fields for different gaze directions is obtained.







Thickness calculation technology:

Circular Fit	▶ Yes
Eliptical Fit	▶ Yes
Optimal Fit	▶ Yes





VISION

focal

Relax

Single vision lens developed for people aged 20-40 years who need to relax the eyes. The best lens for students and pre-presbyopic people who suffer from eye strain.











Sport

Designed for high-performance athletes who wear wraparound glasses to take on every challenge.

RoTech and WearFit technology work together to deliver personalized fit and visual comfort.







Circular Fit	▶ Yes
Eliptical Fit	► Yes
Optimal Fit	▶ Yes



Kriptok Blended

Specially designed for users who are looking for bifocal designs. Aesthetically improved thanks to its invisible segment + accurate as lens made with Freeform Technology.







Ultex Blended

Specially designed for wearers who are looking for blended bifocals with round segment, ranging in size from 40-45 mm diameter.









Freeline

Bifocal with greater aesthetics using the peripheral areas of the lower meridian to improve the invisibility of the segment.







Drive

Progressive designed for those who spend most of their time behind the wheel. It incorporates Free Periphery Process which allows the lens to be free from peripherical astigmatism to achieve safer and more comfortable driving.







Sport

Progressives developed for any sport activity. Ro+Tech technology improves peripheral vision and allows the choice of a wide variety of wrap-around frames suitable for sports eyewear.









Outdoor

Progressive designed for people who have a very active life outdoors.









Indoor

Progressive lens designed for indoor work environments with great amplitude in near and intermediate vision.









Designs | **Specialties**

Monovision

Progressive lens specially designed with null inset and specular symmetry for users with monocular vision due to convergence insufficiency or to the loss of an eye.











Al-Driven Vision

Progressive and Specialty Lenses designed by Artificial Intelligence

Novar Al·Lens
Novar Al-Work
Novar MyoFix
Novar MyoLens

Al·Lens

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It is the result of the latest and greatest global technological innovation to achieve results beyond what has been known before, optimizing the lens so you can see the world without peripheral limits.

The revolutionary AI-GET technology of artificial intelligence, exclusive to Novar, allows you to design your progressive lenses to obtain optical qualities that surpass any other developed by humans.

Recommended for those who require the most advanced technology that a progressive lens can offer for their vision.











Al-Work

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AIWORK lenses leverage Artificial Intelligence (AI) to deliver highly optimized solutions for professionals in modern work environments. These lenses are designed to provide precise visual performance across near, and intermediate vision zones, making them ideal for multitasking and prolonged digital use.

The advanced AI algorithms used in AIWORK lenses allow for personalized lens designs tailored to the user's unique working distances and visual requirements. By minimizing peripheral distortions and enhancing optical precision, they ensure smooth transitions between visual zones, reducing eye strain and increasing overall comfort.





Prism prescribed by design	▶ Yes
Automatic base curve selection	▶ Yes
Possibility of calculation by degression	 0.75, -1.00, -1.25, -1.50, -1.75, -2.00, -2.25
Possibility of calculation by distances	 Computer (0,75 mts / 2.40 ft) Desktop (1,3 mts / 4.20 ft) Life (1,5 mts / 4.90 ft) Meeting (2 mts / 6.50 ft) Room (4 mts / 13.10 ft)

DIMENSIONS MAP novar (RP) O LRP O O UP C FH NRP 34mm





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Customized Single Vision Lens for the Treatment of Progressive Myopia in Children and Adolescents.

With a central correction zone and controlled peripheral defocus in the rest of the lens, it corrects vision and slows axial elongation.



Calculation technology	Defocus Technology
Availability of materials	 Organic, Trivex, Poli, High index
Availability of indexes	1.50, 1.53, 1.56, 1.59, 1.60, 1.67, 1.74
Precalibration	▶ Yes
Maximum diameter	▶ 85 mm
Correction Zone Diameter	▶ 9 mm
Peripheral Defocus	Starting from 9 mm
Transition	▶ 1 mm
Spherical power range	▶ -0.25 / -25 D
Cylindrical power range	▶ -6/+6 D
Automatic base curve selection	▶ Yes

Circular Fit	► Yes
Eliptical Fit	▶ Yes

Optimal Fit	▶ Yes
Smart Fit	▶ Yes
Blending Technology (+ / -)	▶ Yes

MyoLens

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Single vision lens specifically designed to optimize myopia correction in the central visual field.

Developed with artificial intelligence, this lens compensates for peripheral overcorrection while enhancing central vision. Combining Psicoptix and AI-GET technologies, it stands out as the best choice for myopic patients.







