THE NEW SHAPE OF IOP.

CATS® Tonometer Prism

CATS | Reichert TECHNOLOGIES AMETEK®

Passionate About Eye Care!

A New, Modern, Patented Prism Designed for Your Goldmann Tonometer.

It is widely accepted that Goldmann tonometry provides clinically reliable IOP measurements in eyes with average corneas. However, we now know that corneal properties such as Central Corneal Thickness (CCT), Corneal Hysteresis (CH), and tear film can vary significantly from average in a large percentage of patients.

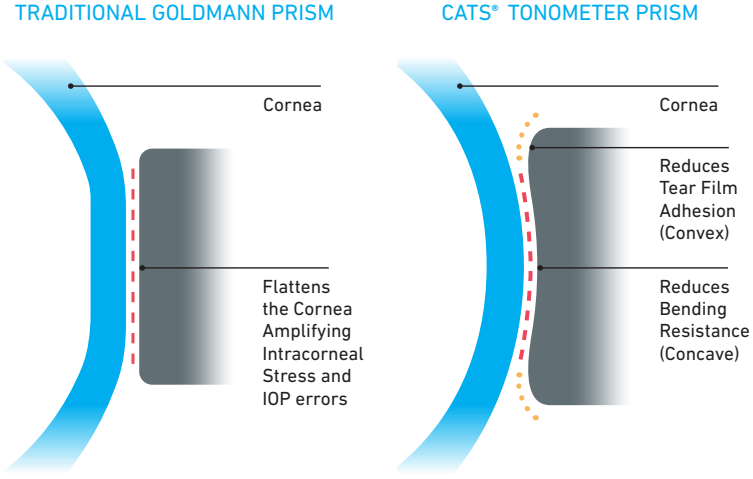
Numerous studies document that thicker corneas cause overestimation of IOP and thinner corneas cause underestimation of IOP. While this is true on average, the use of CCT-based IOP correction formulas, to determine individual IOP values, is not reliable. In fact, experts agree formulas that adjust IOP based solely on CCT are neither valid nor useful.[1] Such formulas can lead not only to errors in the amount of correction, but also in the direction of the adjustment.

Since accurate measurement of IOP is critical to proper patient diagnosis and follow up, a more dependable solution is essential.

Designed to overcome known sources of tonometric error.

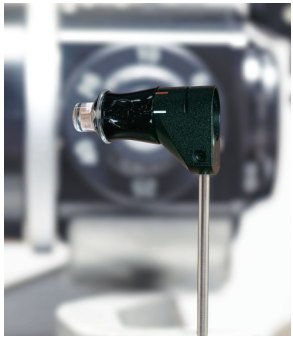
CATS® Tonometer Prism features a unique, patented, dual-curved surface design that effectively reduces measurement errors caused by corneal biomechanics, corneal thickness, and tear film, which affect a large percentage of patients.[2] Traditional Goldmann tonometer prisms work by "flattening" the cornea, which amplifies intracorneal stress during the measurement process. The curvature-matching principle of CATS Tonometer Prism "cups" the cornea, reducing the impact of corneal thickness and corneal biomechanics on the IOP measurement. In addition, CATS Tonometer Prism has a rolled outer edge which minimizes the tear film adhesion that affects traditional Goldmann prisms.[3-5]

Designed to give you confidence in your Goldmann IOP readings.[6,7] In patients with normal corneas, CATS Tonometer Prism will match traditional Goldmann prism results closely. As patients' corneal properties deviate from average, the difference between CATS and traditional Goldmann results will increase due to the ability of CATS Tonometer Prism to "ignore" corneal factors that produce IOP errors with the traditional Goldmann prism. Of key importance, CATS Tonometer Prism is specifically designed to equal the results of a traditional Goldmann prism for normal corneas. This ensures that you are able to interpret IOP results with greater confidence utilizing the same measurement technique.[3-7]



Easy Integration into your Practice.

CATS Tonometer Prism can be easily mounted on any Goldmann or Perkins tonometer. Simply replace your traditional Goldmann prism to immediately realize the benefits of CATS Tonometer Prism using the same technique you are already familiar with.



Improved Positioning that Self-Centers.

The flat surface of a traditional Goldmann prism tip permits IOP error from sub-optimal positioning, because it is subjectively centered when placed on the cornea. Due to the curvature-matching surface, CATS Tonometer Prism self-centers on the cornea, providing clearer and sharper mires when properly positioned on the apex of the cornea. Improper application of CATS Tonometer Prism to the cornea results in obviously skewed mires which will not intersect for measurement. This immediately prompts the clinician to re-position the tip with perfectly centered mires on the corneal apex, which ensures optimal accuracy and repeatability of IOP measured by CATS Tonometer Prism.

References:

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3. McCafferty S, Tetrault K, McColgin A, Chue W, Levine J, Muller M. Modified Goldmann prism intraocular pressure measurement accuracy and correlation to corneal biomechanical metrics: multicentre randomised clinical trial. Br J Ophthalmol. 2019 Dec;103(12):1840-1844. doi: 10.1136/bjophthalmol-2018-313470.

4. McCafferty S, Lim G, Duncan W, et al. Goldmann tonometer error correcting prism: clinical evaluation. Clin Ophthalmol 2017;11:835–40.

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CATS® Tonometer Prism

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