

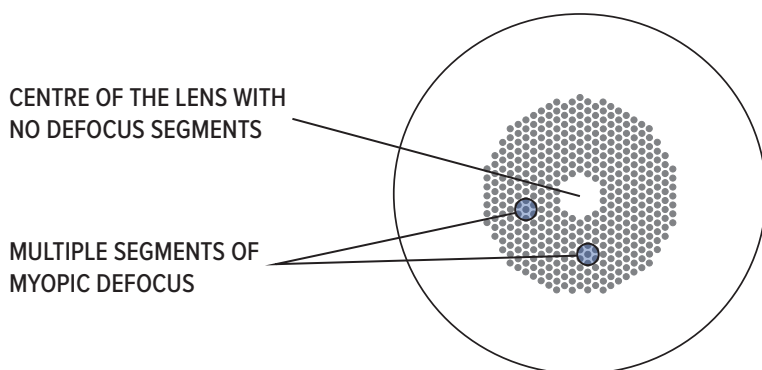
MIYOSMART FREQUENTLY ASKED QUESTIONS

What is MiyoSmart?

MiyoSmart is a spectacle lens design that uses D.I.M.S. technology for myopia control which was developed by Hoya in partnership with The Hong Kong Polytechnic University. In 2018, the MiyoSmart lens with D.I.M.S. technology was awarded the prestigious Grand Prize, Grand Award and Gold Medal at the 46th International Exhibition of Inventions of Geneva, Switzerland.

What is D.I.M.S technology?

D.I.M.S stands for Defocus Incorporated Multiple Segments. It is the basis of Hoya's myopia control lenses, known as MiyoSmart. The lens is comprised of a central optical zone for correcting refractive error and multiple defocus segments evenly surrounding the central zone (extending to the mid-periphery) of the lens to control myopia progression. This provides clear vision and myopic defocus simultaneously at all viewing distances.



How does it work to slow down myopia?

The lens makes use of the natural homeostatic mechanism known as "emmetropisation", whereby the eyeball adapts and shapes to receive focused images as it does for normal vision. Creating a myopic defocus (bringing rays in front of the retina) as with MiyoSmart lenses, prevents eyeball (axial length) elongation which is linked to myopia progression.

What are the main benefits of MiyoSmart?

MiyoSmart is a safe and non-invasive option for slowing myopia progression. The wearer receives correction of his/her refractive error while his/her myopic progression is slowed down. MiyoSmart also allows the wearer to move around with ease, as the lenses are impact-resistant. The lens is aesthetically pleasing with its smooth surface and near-identical appearance to single vision lenses. A clinical study concluded that MiyoSmart with DIMS Technology had myopia progression reduced by an average of 60%.^{*1}

¹Published article in the British Journal of Ophthalmology 29/05/2019
<https://bjophth.com/content/early/2019/05/29/bjophthalmol-2018-313739>

Have the effects of MiyoSmart been clinically proven?

Yes. Beyond correcting myopic refractive error, a two-year clinical trial started in 2014 involving 160 children aged 8-13, showed that MiyoSmart with D.I.M.S. (Defocus Incorporated Multiple Segments) technology works to curb myopic progression by up to 59%². The results of the trial also showed that the children using the MiyoSmart lens had less axial elongation by up to 60% as compared to those wearing single vision lenses.

Is it the same for Caucasian eyes?

Yes, we can extrapolate the COMET study³ showing no statistical difference between multi-ethnic groups.

What is the defocus power of each island in the treatment zone?

+3.50D

Why +3.50D and not a different power?

The Hong Kong Polytechnic University tested multiple power options and found that +3.50D is the maximum power that can be applied to be able to add AR and have an acceptable stack thickness. This is the most effective power for controlling myopia progression.

What is the power between the little islands?

The full prescribed distance power. That's why the patient can see well through the lens at any given time. There is a 50:50 ratio of how much he/she looks through his/her full prescription and the treatment zone. This ratio has been tested and verified to achieve comfortable vision while having an impact on myopia progression. Your brain focuses on the clear vision, not on the blur. The clear zones allow patients to see well, and the blur is what helps the natural homeostasis of the eye to reduce myopia progression. Half of the rays are focused on the retina (clear) and the other half are focused in front of the retina (myopic defocus).

How big is the treatment zone vs the central zone?

The treatment zone measures 33mm and the central zone measures 9.4mm.

Why not put the treatment everywhere on the lens?

It's all about the clear central zone. We need to have a zone where we can read the power for verification and where it offers perfect distance vision. The 33mm treatment zone works for most children or frames will be cut out for bigger ones. The wearer would have to be in a very odd position to look outside of the zone or have to have their head turned in one direction and look totally on the opposite side, which is very odd and unusual.

What is the recommended adaptation period?

We recommend a 1 to 2 weeks adaptation period where we suggest constant wear and to avoid sports. MiyoSmart is considered to be very easy to get used to, compared to a new pair of single vision lenses.

² *Published article in the British Journal of Ophthalmology 29/05/2019 <https://bj.o.bmj.com/content/early/2019/05/29/bjophthalmol-2018-313739>

³ Published in the National Library of medicine 22/10/2001 <https://pubmed.ncbi.nlm.nih.gov/11578789/>

What is the recommended age for MiyoSmart?

In general, MiyoSmart lenses are suitable for patients aged 6-18. It can be prescribed when the first sign of myopia appears and for as long as there are signs of progression. The final determination is made by the Eye Care Professional.

Can young adults drive with MiyoSmart lenses?

There is no contraindication for driving with MiyoSmart.

Does the pupil size have an impact on the vision with MiyoSmart?

No negative effect has been reported related to pupil size while wearing MiyoSmart lenses.

Why is MiyoSmart only available in polycarbonate?

Polycarbonate is the best material selected for the safety and light weight properties. We can also incorporate the D.I.M.S technology easily on this material.

What treatment can I order with MiyoSmart lenses?

MiyoSmart comes with only one treatment option which includes anti-reflection, scratch resistance, easy-clean and UV protection. We simply call it the MiyoSmart Coating which includes anti-reflective, scratch resistance, oleophobic and water repellent properties (close to HDP). UV protection is offered respectively through the 1.59 material.

Why can't I order MiyoSmart with EX3 or EX3+?

It is not possible to add EX3 or EX3+ from a manufacturing standpoint on top of the D.I.M.S. technology Hoya had to select the most appropriate treatment which is the MiyoSmart Coating.

Which measures do I need to give to the lab to order?

MiyoSmart is as easy to order as any SV. You only need to provide monocular PD and OC height. Respect the difference in OC height if any. Design is optimized for frame fitting around Wrap 0-5°, Vtx ≤ 10 mm and Panto close to 0°. Hoya analyzed children fits to ensure that MiyoSmart encompasses these values.

What is the RX range for MiyoSmart?

Plano to -10.00 Max Cyl -4.00 (Total power -10.00) Max Prism 3^Δ Dioptres

What are the blank sizes for the MiyoSmart?

The blank sizes are as follows:

- 60 – 65 – 70 – 75 mm

Can I order a tint or Sensity® on MiyoSmart?

No, MiyoSmart only comes in clear because of the honeycombs structure on the lens. If a patient requires a tint, we recommend ordering a custom clip. Please remember that MiyoSmart offers front UV protection because of the material.

Is MiyoSmart included in the Eye-M-Growing program?

No. MiyoSmart is a specialty lens design and cannot be combined with the EMG offer.

What is the warranty on MiyoSmart?

1 year – 1-time Dr Change replacement if patient's spherical equivalent power changes from 0.50D or more
2 years – 1-time replacement for defective coating. Total Satisfaction warranty also applies
120 days - total satisfaction guarantee

How do I place an order?

You can order MiyoSmart lenses at <https://lensesbyhoya.ca/> by using your NET account # or through DVI using your NET account since MiyoSmart is offered at the same equal NET price for everyone.

How do I block and edge MiyoSmart?

Like a traditional SV polycarbonate lens. The only thing to be mindful of is if you ordered prism. Please follow the rule and adjust the OC manually (1.00D of prism = 0.25mm decentration). Contact the lab for more information or send to us for edging.

What is the TAT?

Average turn around time is 7 to 10 business days.

Can MiyoSmart be used in conjunction with other myopia control treatments available in the market currently?

Theoretically yes, but we do not have any clinical studies to show what effects these combinations may have. The decision to prescribe or dispense MiyoSmart lenses rests with the judgement of the Eye Care Professional.

Should a plano child be recommended D.I.M.S. as a preventive approach?

Theoretically yes, but at the moment we have no available clinical evidence to support this. This is currently under investigation.