



bhs[®]

HMD 2.0

The next generation Head-Mounted Display

With the latest generation of our Head-Mounted Display, we have further improved one of the key components of the RoboticScope® visualization system. The new HMD is available with two different lens systems as '**Premium**' and '**Classic**' models.

	Premium	Classic
Re-engineered back-part with removable counterpoise	✓	✓
Increased comfort	✓	✓
More balanced feel	✓	✓
Improved stability	✓	✓
Quicker set-up time and ease of use	✓	✓
Eyepieces with aspherical lens system	✓	
Reduced spherical aberration	✓	
Improved field curvature	✓	
Increased image stability	✓	
Higher focus-area tolerance	✓	
Improved detail and color transmission	✓	



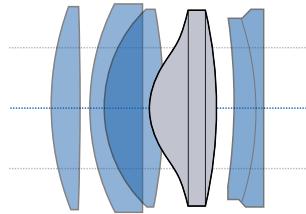
Premium & Classic: Comfort upgrade

The whole rear part of the HMD has received a significant upgrade. The re-engineered back part wraps around the back of the head and provides a **secure, comfortable fit**, which should be particularly significant during longer procedures. The new design includes a removable counterpoise for a more **balanced and stable feel**.

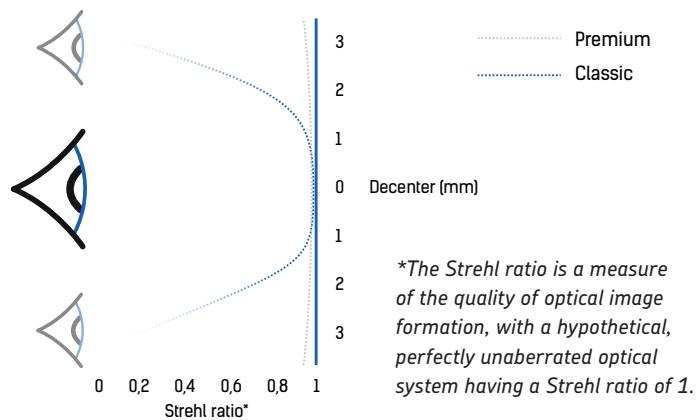
Users will also benefit from a **quicker set-up time** as it is now even easier to adjust the fastening system and **establish the correct position**. Initial feedback suggests that especially first-time or infrequent users will benefit greatly from these improvements.

Aspheric Lens System

An aspheric lens or asphere is a lens whose surface profiles are not portions of a sphere or cylinder.



The asphere's more complex surface profile can reduce or eliminate spherical aberration and also reduce other optical aberrations such as astigmatism, compared to a simple lens. Aspheric lenses allow for crisper vision than standard "best form" lenses, mostly when looking in other directions than the lens optical center.



*The Strehl ratio is a measure of the quality of optical image formation, with a hypothetical, perfectly unaberrated optical system having a Strehl ratio of 1.

Premium: Improved optical performance

In contrast to the Classic model, the Premium HMD uses our newly developed Premium Lens System, which incorporates an aspherical lens design to **reduce spherical aberration** and enhance overall image quality.

The **improved field curvature** results in higher image stability and focus-area tolerance, which means that the eyes do not have to be centered on point to receive a **sharp high-quality image**.

This **increased tolerance** should lead to intuitive handling even for surgeons who have previously only used conventional microscopes.

