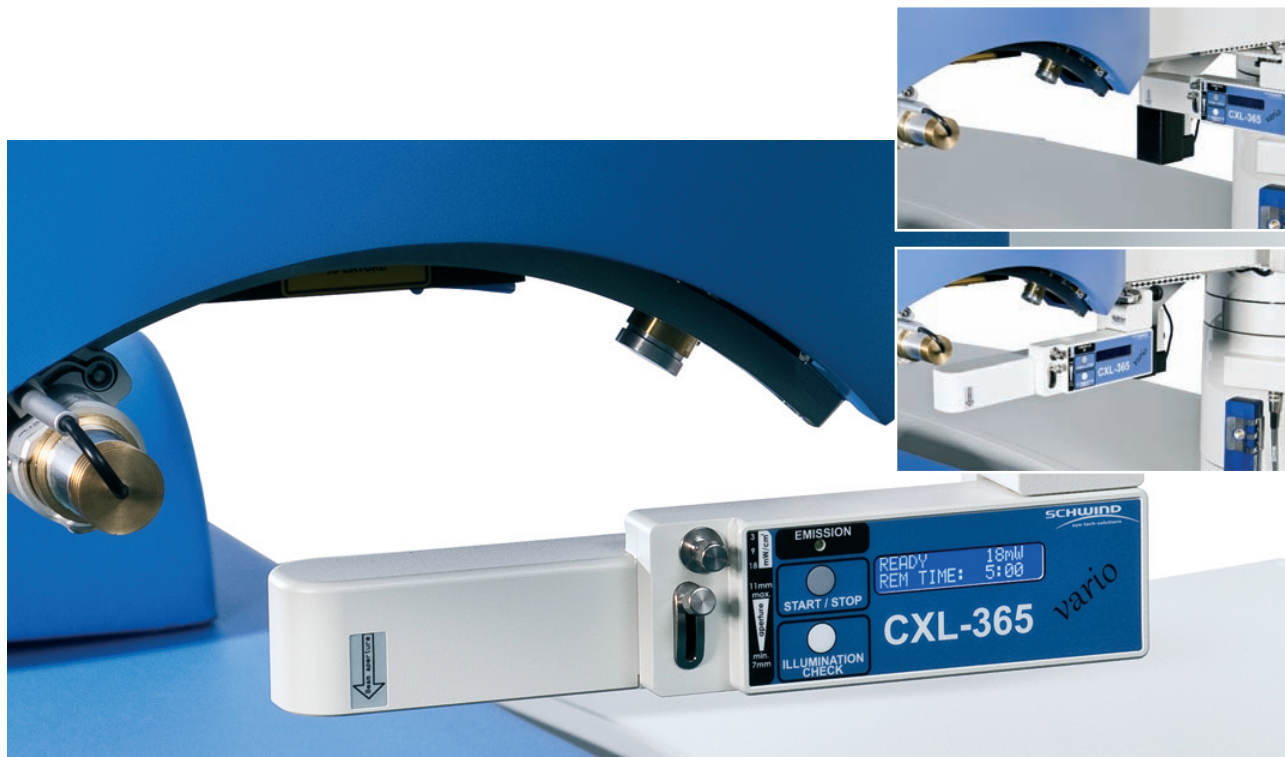


SCHWIND CXL-365 vario system

Corneal collagen cross-linking with SCHWIND AMARIS laser systems



► SCHWIND eye-tech-solutions is consistently expanding its competence in therapeutic corneal surgery. The company is the first and only manufacturer of excimer laser systems to offer the integrated SCHWIND CXL-365 vario system for the so-called corneal collagen crosslinking (CXL).

► CXL using ultraviolet A (UVA) light and riboflavin (vitamin B2) was introduced as a clinical application to stabilize the cornea by inducing cross-links within and between collagen fibres.

► CXL has been investigated extensively and has been shown clinically not only to arrest the progression of keratoconic or post-LASIK ectasia but also to exert a moderately positive effect on visual status. With its minimal cost, simplicity and proven positive clinical outcomes, CXL can be regarded as a very useful approach to reduce the number of keratoplasties performed.¹

► The widely accepted standard protocol for CXL involves corneal epithelial removal to facilitate the penetration of riboflavin into the stroma. Here, the epithelium is removed either as transepithelial approach with SCHWIND AMARIS laser systems or as manual or alcohol-assisted debridement.

¹ M. Hovakimyan, R. F. Guthoff, and O. Stachs, Collagen Cross-Linking: Current Status and Future Directions, Journal of Ophthalmology, vol. 2012.



Effectiveness and safety

The innovative SCHWIND CXL-365 vario system was designed paying special attention to effectiveness, safety and user comfort. It is equipped with three power levels of 3, 9, and 18 mW/cm². The highest power level enables a cross-linking within five minutes. A display shows the remaining treatment time.



Adjustable beam diameter

The SCHWIND CXL-365 vario system comes with a high performance diode and special optics which ensure homogeneous illumination and constant irradiation intensity over the entire corneal surface. To protect the limbal stem cells and to focus the beam on the clear cornea the system has a continuously adjustable aperture from 7 mm to 11.3 mm.



User-friendly installation

The SCHWIND CXL-365 vario system is installed under the laser arm. In the parking position, the aperture is positioned above the external sensor. The energy check is easy to perform prior to treatment. For treatment the system is moved to the left and swivelled by 90°.



Easy pre-positioning

The treatment planes of the SCHWIND AMARIS laser systems and the SCHWIND CXL-365 vario system are identical. The precise x/y adjustment of the patient bed ensures easy patient positioning. All laser systems in the SCHWIND AMARIS product range can be optionally equipped with the SCHWIND CXL-365 vario system.

Technical data

Wavelength:	365 ± 5 nm	Power density:	3, 9, 18 mW/cm ²
Working distance:	50 ± 5 mm	Timer:	30, 10, 5 min
Light emission:	continuous wave (cw)	Beam diameter:	7 – 11.3 mm; continuously adjustable