EndoSTROB system
XION EndoSTROB systems are designed for ENT medicine. These systems are characterized by high image quality, ease of use and user-friendly acquisition, processing and storage of data.

**XION trolley premium with intelligent control centre**

The innovative trolley and the individual XION components incorporated within it form a coordinated system featuring highest functionality. Features such as an integrated uninterruptible power supply (UPS), the isolation transformer with earth-leakage monitor, the central on/off control system and the isolated network interface with 1Gbit/s provide for an optimum work flow and meet all requirements for safety and ergonomics in complex endoscopic systems. Other features such as a special device mount or an integrated pre-heater ensure high ease of use and optimum workflow. Interfaces directly accessible from the outside facilitate easy connection of external video sources (e.g. operating-room microscope) or temporary secondary monitors and direct integration into the hospital network.

**XION DiVAS – digital video archiving and analysis with HIS/PACS connection**

The modularly structured DiVAS software is scalable from a single-user solution for recording and editing patient, image and measurement data, to a complex network solution for recording all relevant examination data produced by an advanced ENT clinic. Integration into the hospital information system (HIS) and the picture archiving and communication system (PACS) is possible at any time.
XION endoscopy systems support all diagnostic and surgical applications in ENT medicine. The system components form a compact, functional unit and offer excellent convenience with optimum image quality.

**EndoSTROB HD camera**

Endoscopic and stroboscopic video data are recorded in full HD 1080p and archived in DiVAS. The integrated zoom lens and the image sensors of the extremely compact camera head provide outstanding image quality in terms of accurate detail, colour rendition and image brightness. Existing XION video laryngoscopes and video nasopharyngoscopes can be used further.

**MATRIX LED duo light source**

Two separately controllable light outputs of the powerful LED light source MATRIX LED duo make it possible to keep two application parts connected so that the workflow of daily routine is improved. When used in conjunction with XION cameras, an automatic control system adjusts the light intensity and avoids burns.

**MATRIX DS data station**

The MATRIX DS data station, which is approved for use in the medical environment, forms the basis for digital recording, managing and evaluating patient, image, video, audio and measurement data in XION endoscopy systems. Compression of HD video signals in H264 / 1080p, a picture-in-picture function and configurable playback on up to four monitors are additional features of the MATRIX DS.

**Video-Nasopharyngoscope**

The flexible video nasopharyngoscopes provide high-resolution images of impressive quality. Thanks to the ergonomically angled hand grip, the image sensor using global shutter technology, and an integrated microphone, the system is not only ideal for routine use but also specifically for laryngostroboscopy and swallowing diagnostics.

**Video-Laryngoscope**

The slim design of the video laryngoscopes has improved patient acceptance for its use in examinations and has thus also contributed significantly to better examination results. All controls for focusing and triggering photo and video recordings are easily accessible with the thumb. The integrated microphone ensures a fixed microphone position so that comparable measurements are obtained.
Video archiving and evaluation
a) Evaluation, navigation within the video, cutting and archiving are quick and easy tasks with DiVAS.
b) Comparing two recordings on-screen provides a means for optimally monitoring the progress of therapy.

Videostrobokymography
Videostrobokymography is an additional method of voice diagnostics for a wide range of users. It is a simple and inexpensive way of calculating kymograms from any stroboscopic recordings. The precise evaluation of stroboscopic recordings, a process that was hitherto only possible with a frame-by-frame display, is significantly improved by means of a simultaneous display of several oscillation phases of a section of the vocal folds.

Standardized findings
By simultaneously displaying the examination video and the assessment form it is possible to easily make a fast image analysis.

Automatic documentation
By automatically generating a summary in the form of a medical report, a comprehensive documentation is made of all assessed parameters, the documented image material and the diagnostic results with individual remarks and therapy recommendations.
XION endoscopy systems set new standards in ENT. DiVAS software provides the features necessary to facilitate a new level of objectivity, validity and reliability particularly in swallowing and voice diagnostics.

1. **Phonetogram**
   This module records the voice range, the dynamics and singer formant of the singer’s voice as well as the speaking voice profile. It additionally calculates the DSI (Dysphonia Severity Index) and displays the maximum phonation time (MPT) in real time.

2. **Voice analysis**
   Computer-assisted voice analysis is used to conduct a detailed analysis of the voice. The system presents the wide-band and narrow-band spectrogram, shimmer and jitter, fundamental frequency, oscillogram, sound-pressure level, LTAS and GRBAS.

**Voice strain test**
The patient’s vocal stamina is recorded automatically. The number and duration of the individual strain stages can be varied. Extensive options for statistical evaluation are also available.

**Electroglottography (EGG)**
The EGG can be recorded while stroboscopy is being performed. A direct comparison of the EGG recordings and the stroboscopic recordings is thus now possible.

**Specialist publication**
Our publication *Aids to Voice Diagnostics — By professionals for professionals* has been written as a compendium for otolaryngologists, speech therapists and phoniatrians. The authors combine machine-aided and perceptive diagnostics, and convey expertise in a short, descriptive and interesting manner from a clinical perspective.

Book your copy on www.xion-medical.com
Everything under control:  
The safe system with optimum handling  
All modules of a XION system are perfectly matched to each other. Devices, endoscopes and instruments form a unit that adapts to your way of working and supports your workflow. Technology from XION helps you to cope with the increasingly complex daily hospital routine.

Everything in view:  
The information hub for your patient data  
DiVAS software ensures valid, comfortable and fast diagnostic findings, their documentation and patient-related data storage. Your diagnostic and treatment data are recorded, analysed and archived. The modular design facilitates adaptation to your current and future needs. Your daily workflow is optimized and thus safer, so that you will have more time for your patients – now and in future.

Everything in flow:  
The network that makes your hospital more efficient  
XION systems can be networked and integrated into the HIS and PACS via standard interfaces (DICOM, HL7). All data are thus automatically, centrally and paperlessly stored. All video, image, audio and other patient data can be accessed from any workstation. Our live video conference system facilitates operating-room communication for second opinions or educational purposes. XION networks thus improve your workflow.

Everything from one source:  
Endoscopy systems since 1991  
XION develops and manufactures devices, endoscopes and instruments for ENT, arthroscopy, laparoscopy and hysteroscopy. In close cooperation with leading hospitals provides us with an environment in which we can create practical and user-friendly system solutions. Well-established and interdisciplinary expertise in the fields of precision mechanics, optics, electronics and software are our basis for setting new standards in endoscopy. All products are manufactured at XION headquarters in Berlin, Germany and sold worldwide through an international network of branch offices and dealers.