

# DATA SHEET: NYOX™

## Field Monitoring

### ONE PLATFORM FOR FIELD MONITORING

#### Your Partner in MR Imaging

A new level of connectivity and ease-of-use

- ▶ Easy installation and handling
- ▶ Light-weight and portable
- ▶ Improved user interface
- ▶ Reduced data size



NYOX is Skope's new field-monitoring platform, set to transform field monitoring practices. By bringing the processing hardware directly into the magnet room, NYOX significantly enhances handling, flexibility, and connectivity. The redesigned hardware and software architecture not only simplifies operation but also ensures more reliable and efficient data acquisition. With NYOX, users will experience a streamlined setup, reduced complexity, and improved overall system performance. NYOX consists of two hardware components and one software component. The hardware includes the base and the controller units, while an additional user-provided PC (Windows) runs Skope's new Field Explorer (skope-fx) software.

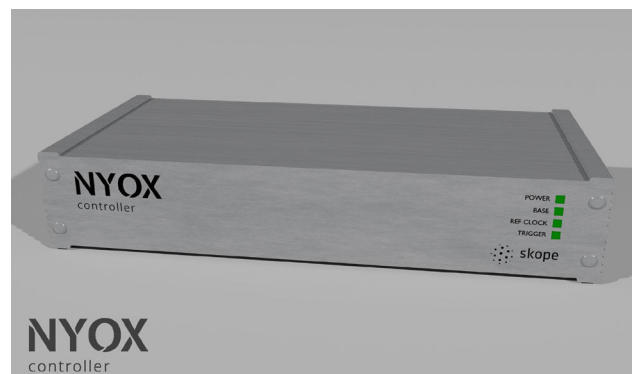


#### 1 NYOX BASE

The NYOX base is situated in the magnet room near the scanner, where it connects to a Skope Field Camera (Dynamic Field Camera, Clip-on Camera, NeuroCam 3T, or NeuroCam 7T). The NYOX base handles essential field-monitoring tasks such as field probe excitation, signal reception, and digitization. The base unit is field strength-specific and tuned to the scanner system frequency.

#### 2 NYOX CONTROLLER

The NYOX controller is located in the technical or console room, functioning as a server. It connects to the NYOX base, the scanner, and additional clients like skope-fx. The controller manages and oversees the field probe data acquisitions. The controller unit is scanner-independent and can be connected to any base unit.



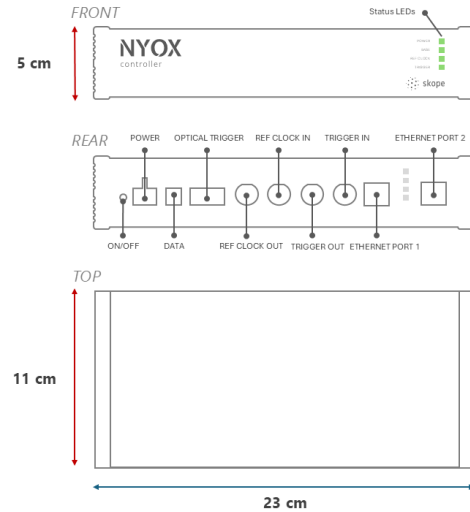
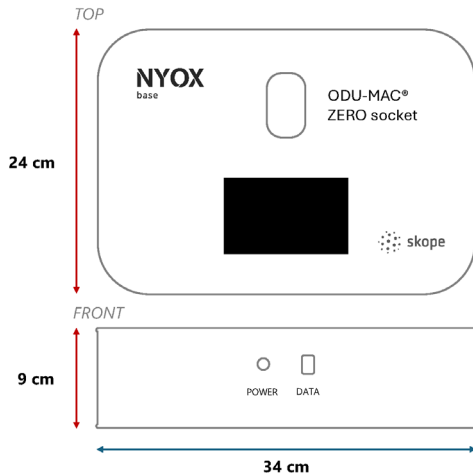
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## 3 skope-fx

The graphical user interface of skope-fx has been completely redesigned and offers a more user-friendly experience. Setting acquisition parameters, reprocessing data, and viewing results have never been easier. Trajectory information is calculated on-the-fly within skope-fx based on the stored field probe raw data. Different field models such as a 2nd or 3rd order spherical harmonics field expansion, can be applied and inspected with just a few clicks.

### Technical illustrations



### Connectivity overview

The NYOX base is powered by an MR-conditional power supply within the magnet room and connects to the controller via a fiber optical cable that can be routed through a wave guide.

The NYOX controller connects to the scanner hardware and provides interfaces for the 10 MHz reference clock and the trigger signal that is used to start field monitoring experiments.

skope-fx (Windows 10/11) as well as other clients can connect to the NYOX controller to execute measurements and receive field-monitored data.

