sina SCOPE

solectrix
high end electronics solutions

sinaSCOPE – **THE DIGITAL 3D UPGRADE FOR** + **STEREO MICROSCOPES**

DISCOVER sinaSCOPE –

THE NEW VERSATILE PLATFORM FOR DIGITAL 3D MICROSCOPY

AN EASY UPGRADE SOLUTION FOR STEREO MICROSCOPES +

With sinaSCOPE, all optical, eyepiece-based stereomicroscopes can be expanded to a digital microscope with two 4K cameras and a 3D monitor.

The eyepieces of the analog microscope are swapped for two 4K cameras and the resulting image is shown on a 3D monitor. The optical properties of the microscope remain unchanged.

sinaSCOPE thus significantly improves workplace ergonomics. Depending on the model, displays with or without 3D glasses are supported.

Another advantage of the digital technology: With just one mouse click, you can have all the image data of the microscope available for further processing once your work is done.

Standard stereo microscope* **Adapter*** **4K cameras + connecting cable** **Image Processing Unit** **3D monitor****
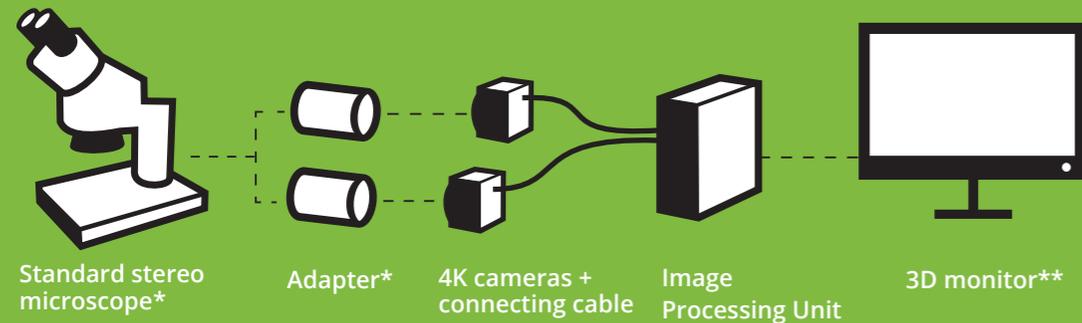
* Standard purchased product (not within scope of delivery by Solectrix GmbH)   ** Depending on version

+ Remove the eyepieces of the stereo microscope
+ Replace them with sinaSCOPE camera heads*
+ No need for complex manual alignment of camera heads
+ Find a comfortable working position
+ Operate your microscope normally as before
+ sinaSCOPE continuously processes and presents a high-quality 3D image

*use off-the-shelf CS-mount adapters for your microscope

POWERFUL SOFTWARE ENABLES EASY OPERATION +

+ Easy installation without the need for complex alignment

+ Automated calibration: 3D image analysis and correction are handled by software running in the background

+ Simple controls via on-screen menu and trackball

+ Extended setup menu

+ Multi-step white balance at the touch of a button

+ Brightness adjustment with exposure and gain control

+ Flexible system setup, e.g., also available as an OEM version for easy integration into your existing system

HIGH-QUALITY DIGITAL IMAGE PROCESSING +

+ Razor-sharp 3D image from two 4K camera heads

+ Excellent image quality thanks to the high-quality Solectrix Image Pipeline

+ Uniform image properties through processing of the 3D image data within a single FPGA

+ All image data are available digitally for further processing in applications (recording and playback in 3D)

SX proFRAME 3.0

OPTIMUM WORKPLACE ERGONOMICS FOR HEALTHY WORKING +

+ Fatigue-proof working on a large 3D screen instead of the limited field of view through a pair of binoculars

+ Prevents a lack of concentration

+ Optimum choice of position

+ Unlimited working and viewing area and allows ergonomic working – the head remains freely movable

+ Single-user application: Autostereoscopic display – supports individual users without 3D glasses

+ Multi-user application: Multiple people can view the 3D image on a separate display (with 3D glasses)

sinaSCOPE OEM VERSION +

PCIe frame grabber card (SX proFRAME 3.0) and camera heads for integration into your own system

sinaSCOPE
PROFESSIONAL +

sinaSCOPE Professional - scope of delivery

FLEXIBLE PC-BASED SOLUTION

+ Image processing electronics in a desktop PC format

+ Also available as an OEM version: Camera heads and PCIe frame grabber card with a software package for deployment in your existing system

+ HDMI socket for use with 3D displays with or without glasses

+ Connection of a second 3D display optional

+ Software for stereoscopic analysis and 3D correction for use with autostereoscopic 3D displays (3D image without glasses)

+ Suitable for one or multiple users simultaneously (depending on the display used – multiple users only with 3D glasses)

+ Perfect for use in education, research, lab work and the medical field

sinaSCOPE Compact - scope of delivery

COMPLETE UPGRADE SOLUTION FOR STEREO MICROSCOPES

+ Autostereoscopic 3D display (3D image without glasses), 15.6-inch diagonal, 3840×2160 px resolution

+ Image processing electronics and eye tracker integrated into one unit with the 3D display

+ Suitable for one user at a microscope workstation

+ Connection of a second 3D display for multiple users optional (only with 3D glasses)

+ Perfect as a microscope upgrade for single workstations in the industrial field or quality assurance
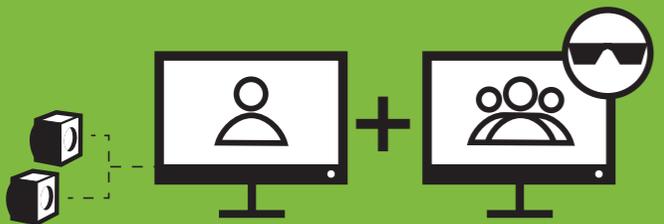
sinaSCOPE COMPACT +

sinaSCOPE Basic - scope of delivery

REAL-TIME DEVELOPMENT PLATFORM FOR CUSTOMER SYSTEMS

+ Real-time output of the 3D image through FPGA-based image processing electronics, i.e. no perceptible latency

+ Image processing electronics in mini box format

+ HDMI socket for use with 3D displays with glasses

+ Suitable for multiple users simultaneously

+ Designed for use as a stand-alone real-time system in R&D
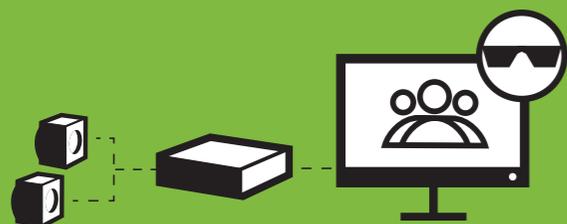
sinaSCOPE
BASIC+

![solectrix logo](high end electronics solutions)

sinaSCOPE IS A DEVELOPMENT OF SOLECTRIX GMBH

For more than 15 years, the company has been successful as a reliable and innovative partner in image data processing at the highest level. Based in the Nuremberg/Fürth/Erlangen area, the design house for embedded systems with its around 120 employees became known for its significant contribution to the first digital professional film camera and its own 3D camera system sinaCAM.

sinaCAM was used to create the ZDF's 3D mountaineering documentary „Die Huberbuam" as well as numerous other TV productions and commercials in unique 3D quality.

A future-oriented automotive innovation from Solectrix was the image data processing for the world's first series-produced, fully digital mirror replacement system for trucks.

The camera-based video grabber and playback system SX proFRAME is used by well-known OEMs for the validation of Advanced Driver Assistance Systems and Automated Driving (ADAS/AD).

For medical technology, Solectrix creates highly integrated systems for laboratory and measurement devices using optical detection modules with cameras developed in-house.

Learn more about Solectrix:
www.solectrix.de

IMAGING   **AUTOMOTIVE**   **MEDICAL**   **INDUSTRIAL**