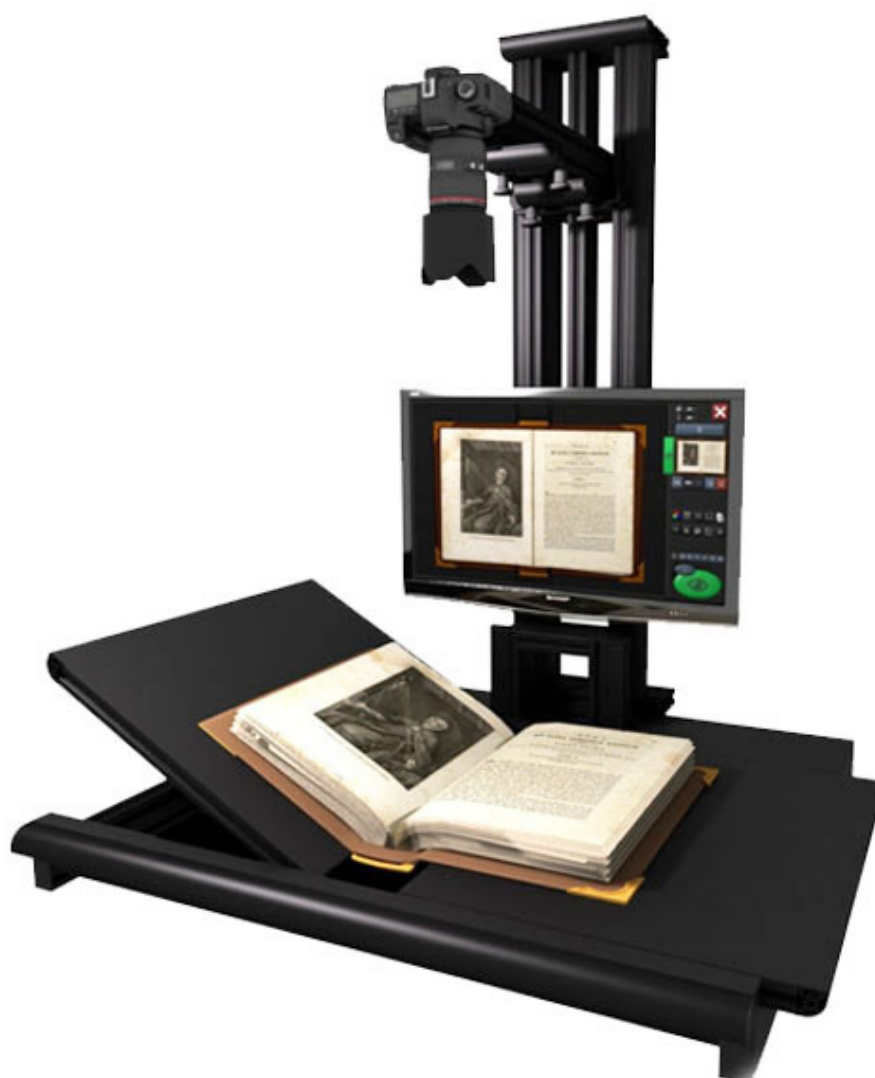# METIS EDS GAMMA

Cultural Heritage

The innovative A1 desktop planetary scanner with a superior image quality, ergonomics and high productivity in a unique integrated solution.
EDS (Easy Digital Scanner) means great quality, speed and ease-of-use.

Variable Scan Area and Resolution

The EDS GAMMA system is possible to customise the scan area size and optical resolution depending on the specific requirements. Final image resolution can further be adapted to specific needs.

There are different ways of customising the scan area size: by using of the zoom lens; by varying the digital camera height and by moving the digital camera towrad the front of the system.
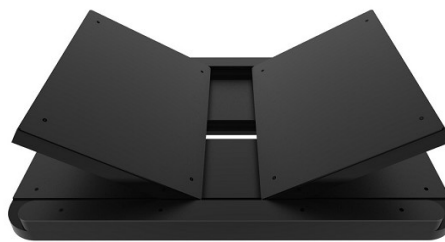
Scan area may vary upto 90 x 60 cm
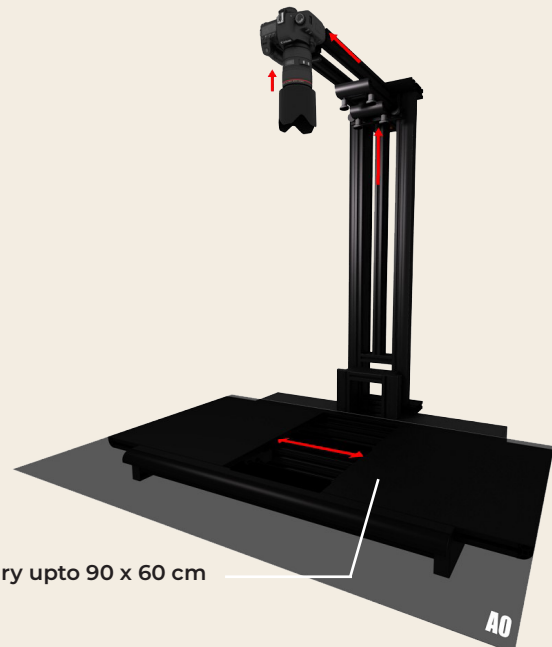
The V-Table Design

**Plates can be tilted independently**   **Example**   **Plates distance may also vary independently**

The EDS GAMMA integrates an innovative V-Table design supported by specific software tools in order to hold the originals in any possible position/angle. The V-Table has been specifically designed by Metis in order to accept and gently hold diffrent kind of originals in an optimal manner, even antique books with limited opening angle. The V-Table allows scanning large books, maps, drawings and many types of originals larger than the A1 format and up to 15 cm of thickness. Thanks to the METIS exclusive "shape recognition" and "curvature correction" technology integrated into the EDS software, the document shape is detected in real time and the acquired image is deskewed in a fraction of second delivering a perfect result.

Automatic Shape & Finger Recognition
The EDS software is capable of recognising the shape of the pages and the operator fingers. Furthermore, the acquisition can be automatically triggered when the fingers are recognised.
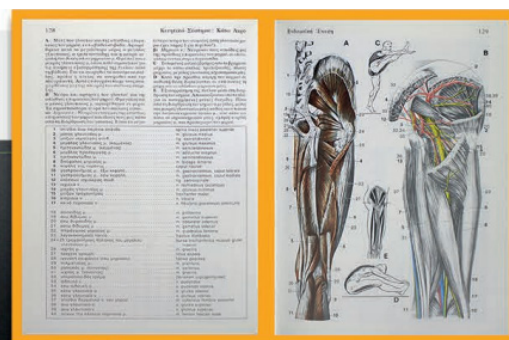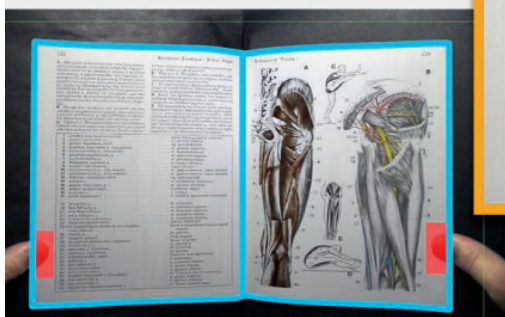
Automatic curvature correction and finger removal
After recognition, METIS EDS software is able to correct the curvature and to automatically remove recognised fingers from the image.

With the Integrated EDS Lighting (4 lamps) in a typical configuration

The EDS Lighting

- Light colour temperature is warm white and provides very high Colour Rendering Index (CRI=93)
- It includes 4 lamps (LED array based) that can be positioned and titlted independently. This allows to optimise the light ditribution over the scan area by maximising uniformity and minimising reflections. Futhermore, the possibility to change the angle of the lamps also allows to optimise for particular types of orginals.
- Every EDS lamp integrates 60 state-of-the-art high power LEDs arranged in a single array (line).
- Every EDS lamp has a 120° uniform output.

- Every EDS lamp delivers a luminous flux of about 950 lumen; a total of 3800 lumen for 4 lamps.
- Luminous flux is equivalent to 4x120 watt traditional bulbs but power consmption is only 4x17 watt.
- Power supply, cables and electronic are directly integrated into the EDS GAMMA structure.
- Two lamps can be connected to form a single light source.
- All lamps are directly controlled from the EDS software (the lamps can be switched ON/OFF independently); a specific USB link is provided in order to connect the EDS lighting with the PC.

Independent lighting position/ tilt

The EDS lighting includes 4 lamps that can be adjusted independently by the user (fixed in different positions and tilted). Customising the light position/tilt allow to control the light distribution over the scan area and to optimise reflections and uniformity. This is very important because different originals may require different arrangements and optimisation of the lighting for best results. Furthermore every lamp is controlled (switched On/Off) direcly from software and according to selected working profile.

Light from top can minimise shadows in the book's gutter

Light directions from the sides may provide higher uniformity especially on large flat originals as maps or drawings
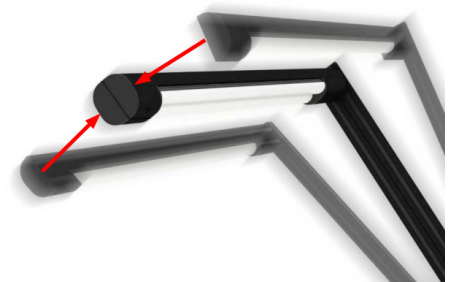
2 lamps can be linked to form a single and powerful light source

Specifications

Technical Specifications

- Supported Cameras: Canon EOS R5 mirrorless full-frame 45 MegaPixels & Nikon D850 reflex full-frame 45.4 MegaPixels.
- Support of Canon and Nikon lenses.
- Integrated sensors for realtime reading of exposure, colour temperature and automatic focus.
- Variable camera height and position in order to optimise scan area and optical resolution; adjustable optical resolution (over 800 PPI is possible) through:
  - integrated Zoom optics with motorised focus
  - variable camera height
- Acquisition area: up to 90x60 cm (35.43 x 23.62in), (A1= 84 x 59.4cm // 33.07 x 23.39in)
- Adjustable working area: it includes the V-table which consists of two tiltable and shiftable fully independent plates which can be easily adapted to different needs and perfectly accomodate even difficult original such as old and fragile books with limited opening angle.
- Acquisition time: <1 second; full cycle time, between one acquisition and the next one, including acquisition, processing and saving; ~2 seconds.
- Professional EDS LED lighting system with CRI=93 and high luminous flux of 3800 lumen; it includes 4 LED lamps fully and independently adjustable in position and tilt. All lamps are directly controlled by the EDS Software.
- Dimensions: Base: width 90cm (35.43in), depth 85cm (33.46in); height 138cm (54.33in); width with open illuminators: about 140cm (55.12in)
- Weight: 55kg (121.25 lb) without camera, computer and monitor.

Minimal PC Specifications

- i7 Intel Processor and 16GB RAM
- 2 x USB-2.0 and 2 x USB-3.0 ports
- Windows 10 or 11 Professional (64 Bit)

METIS EDS Software Specifications

- Background & parallel image processing/saving (image processing and saving do not affect the acquisition time)
- "Live Video" function allows a realtime control over the scanning area; this is particularly useful in order to maximise image quality and to perfectly position the original respect to the camera.
- Image review and navigator tools with a full resolution image viewer.
- Automatic JOB handling with full image and shooting parameters save and reuse.
- Automatic image naming with user selectable rules (customisable fields, programmable increments, programmable actions, etc)
- Automatic or manual exposure and grey balance control (light colour temperature compensation)
- Automatic or manual focus control (with depth of field cutomisation)
- Manual and automatic crop
- Automatic deskew and curvature correction
- Automatic book centre and shape recognition
- Automatic page split with definable overlap
- Light uniformity and paper colour correction filters.
- Automatic fingers recognition and removal filter
- Anti-Reflection shooting mode (for glossy originals)
- EDS Light Control directly from the EDS sotware
- Keyboard shortcuts
- Image saving (24bit): TIFF, JPEG, JPEG2000, BMP, PNG, PDF-A, Multipage TIFF, TIFF G4 1bit

Product specification or appearance may change without prior notice.

GENUS