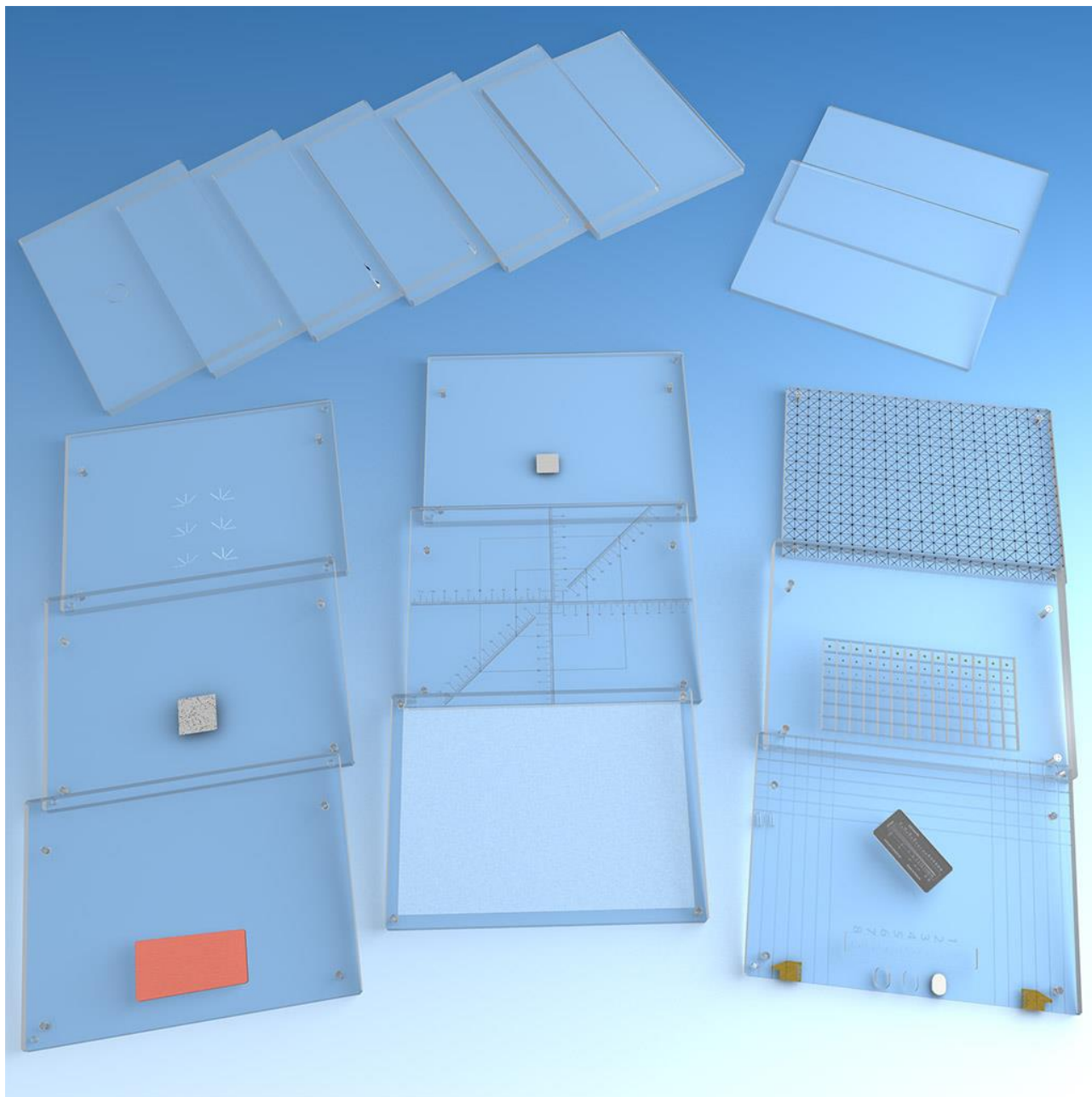


## Pro-DigiMAM



This versatile phantom can be used for monitoring technical parameters of digital mammography imaging systems according to the requirements of the "European Guidelines for Quality Assurance in Mammography Screening" and IEC 61223-3-2:



- optical density / luminance in the reference point
- spatial resolution
- threshold contrast visibility
- contrast
- effective radiation field
- automatic exposure timer
- CNR, SNR
- NPS
- MTF
- ghosting
- filaments
- artefacts evaluation
- geometric distortion check
- contrast details

**Technical data (can be modified to customer specifications):**

- dimensions: 240 x 180 mm or 300 x 240 mm
- modular construction – different modules can be firmly placed on the main module
- main module – set of PMMA attenuation plates: 6x 10mm thick and 2x 5mm thick; one plate contains reference point marking
- CNR module – 10mm thick module containing 20 x 20 x 0.2mm aluminium filter, located 6 cm from the chest side
- resolution and geometry module – 10mm thick module containing:
  - pattern for the line pair resolution evaluation (from 1,5 to 20,0 LP/mm) rotated 45°
  - 8 low contrast objects ( $\varnothing$  5.5mm and depth from 0.1mm to 0.45mm)
  - 3 objects of a different absorption level
  - pattern for evaluation of the effective radiation field





- contrast detail module – 20mm thick module containing gold (99.99%) discs organized in a 7x14 matrix (diameter x thickness).  
Discs have following diameters: 0.1, 0.25, 0.5, 0.75, 1.0, 1.5, 2.0mm and 14 thicknesses ranging from 0.03 to 2.0µm.  
Thickness accuracy: 1nm (0.001 µm), diameter accuracy 0.001mm (1µm)
- ghosting module – 10mm thick module containing 30 x 30 x 0.1mm aluminium filter for a ghost test
- MTF module – 10mm thick module containing straight stainless steel edge accurate to ±2µm at a 3° angle
- filaments module – 10mm thick module containing 6 groups of multi-directional filaments 0.40mm to 0.20mm in diameter
- artefacts evaluation module – 10mm thick module containing mesh for artefacts evaluation
- geometry distortion module (scales) – 10mm thick module containing a grid with scales
- geometric distortion module (mesh) – 10mm thick module containing a wire mesh of horizontal, vertical and diagonal lines (45°)
- carrying case

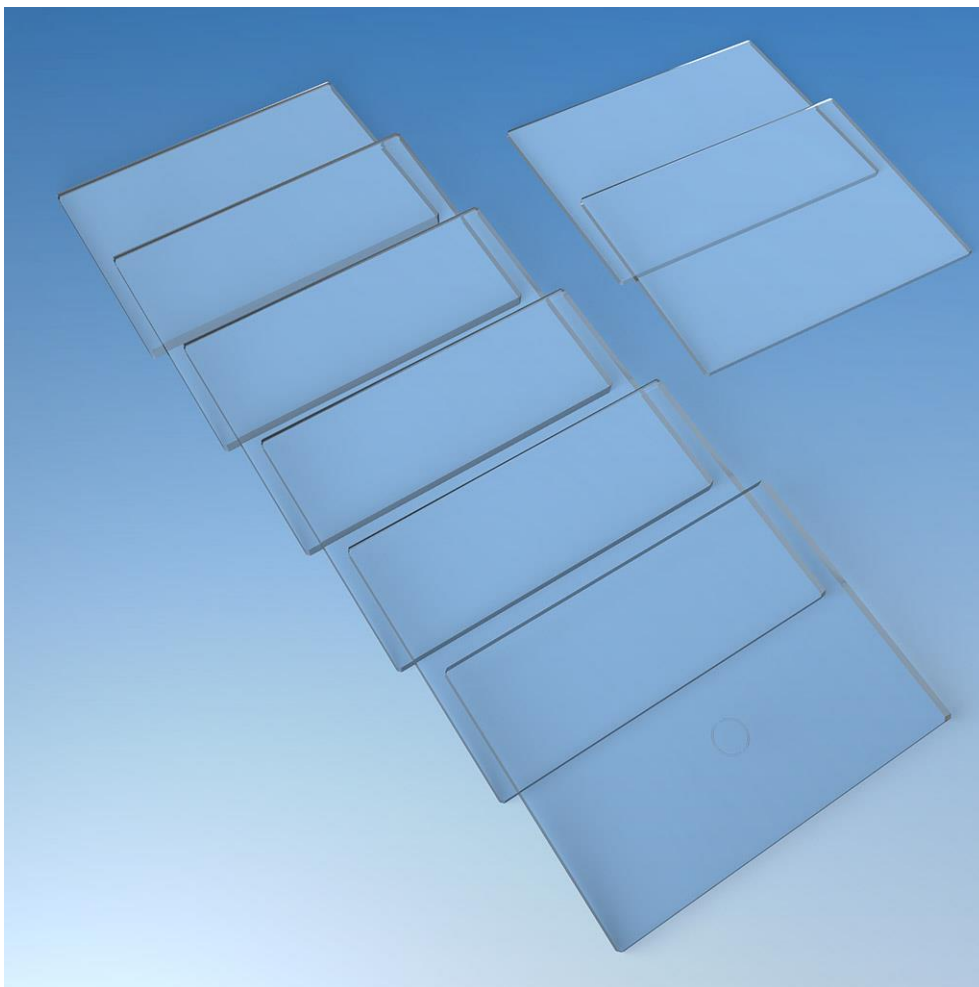
**Product features:**

- Complies with:
  - IEC 61223-3-2
  - "European Guidelines for Quality Assurance in Mammography Screening"
- CE certified
- manual provides detailed guidelines for carrying out each test, results assessment and registration



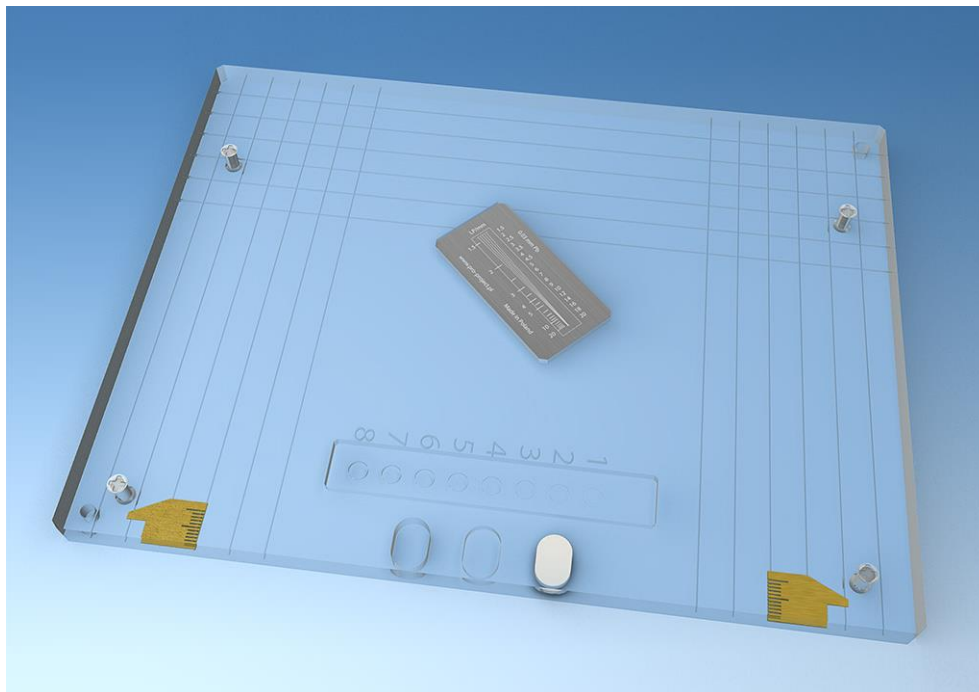


**RADIATION**  
under control

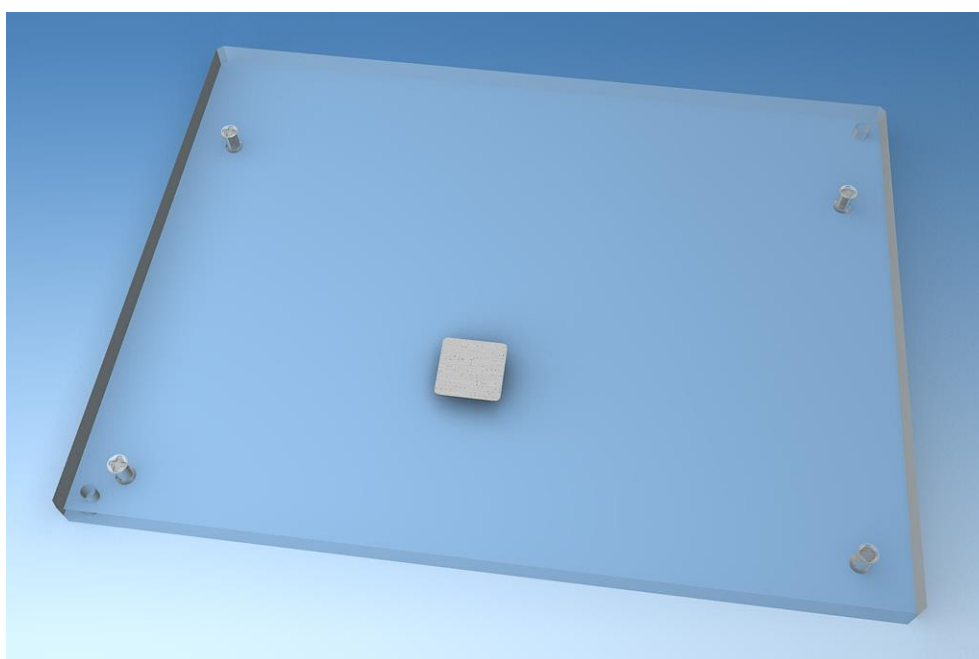


main module

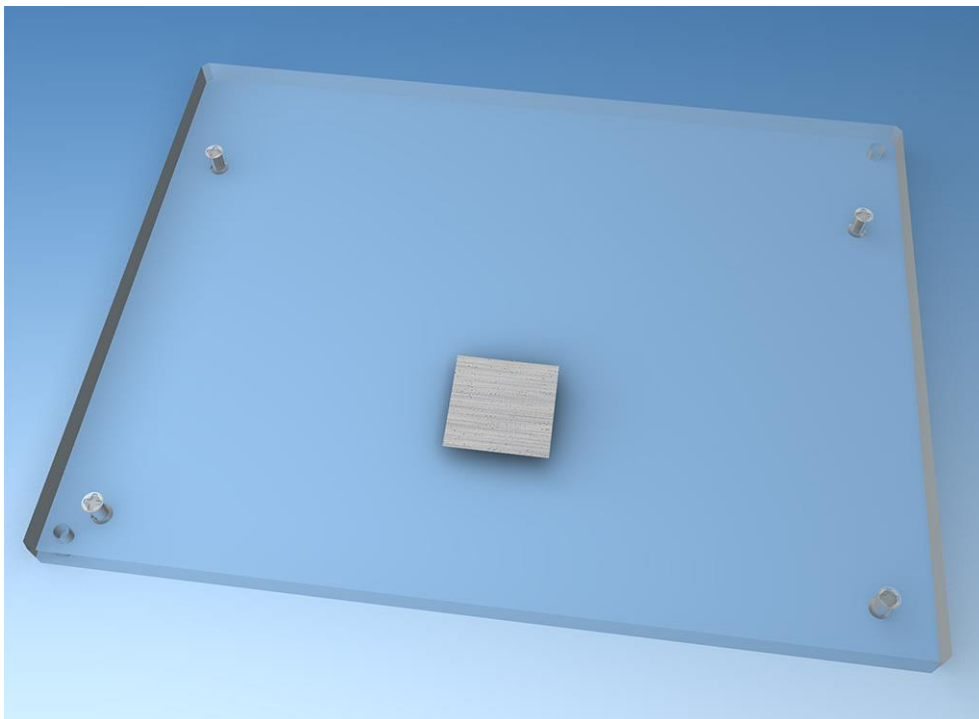




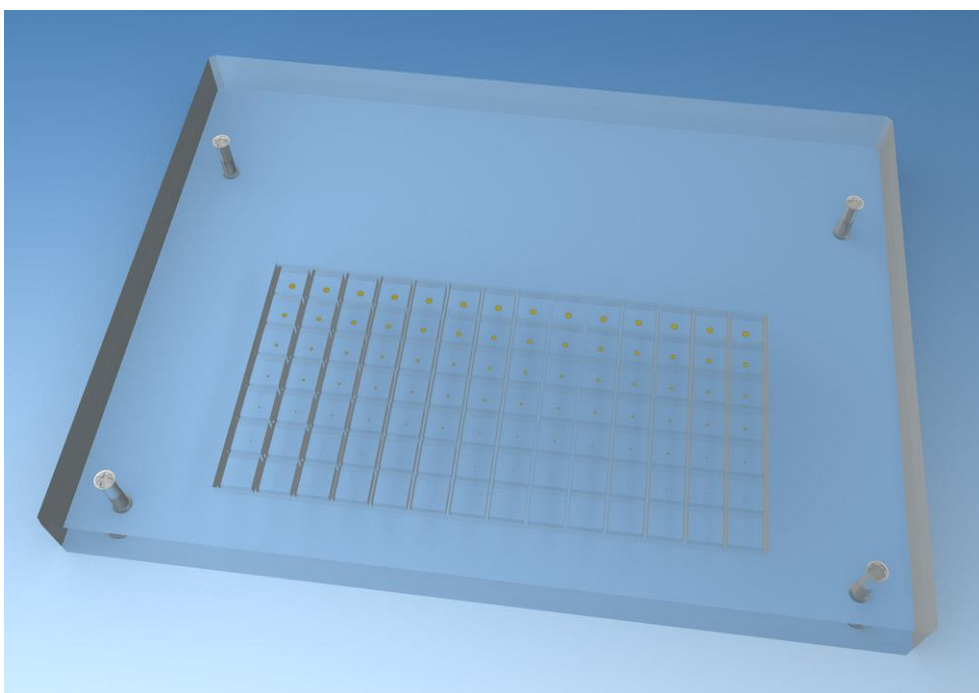
resolution and geometry module



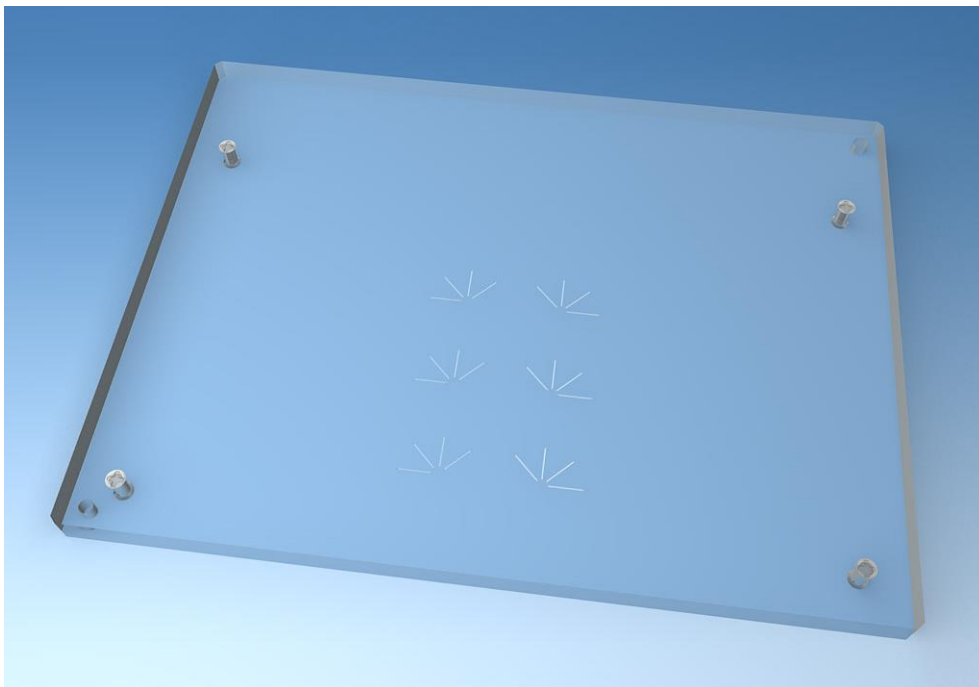
CNR module



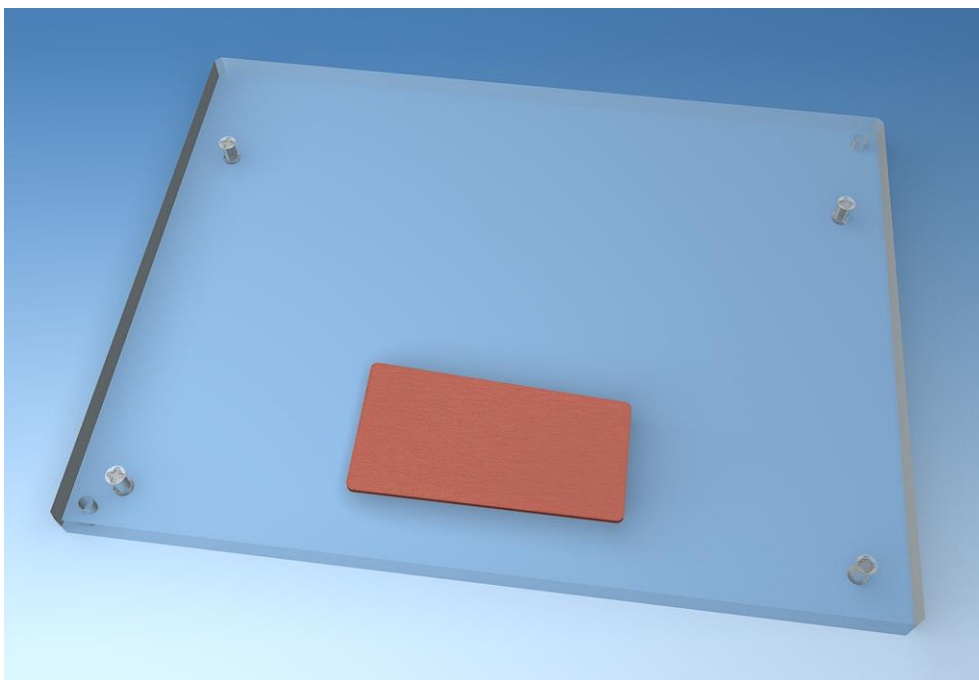
ghosting module



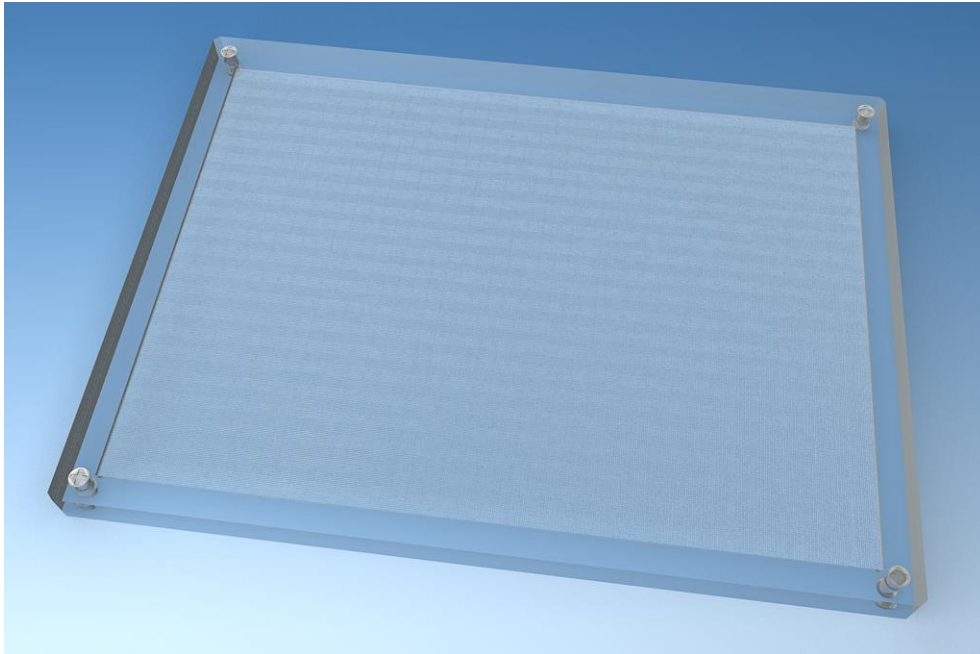
contrast details module



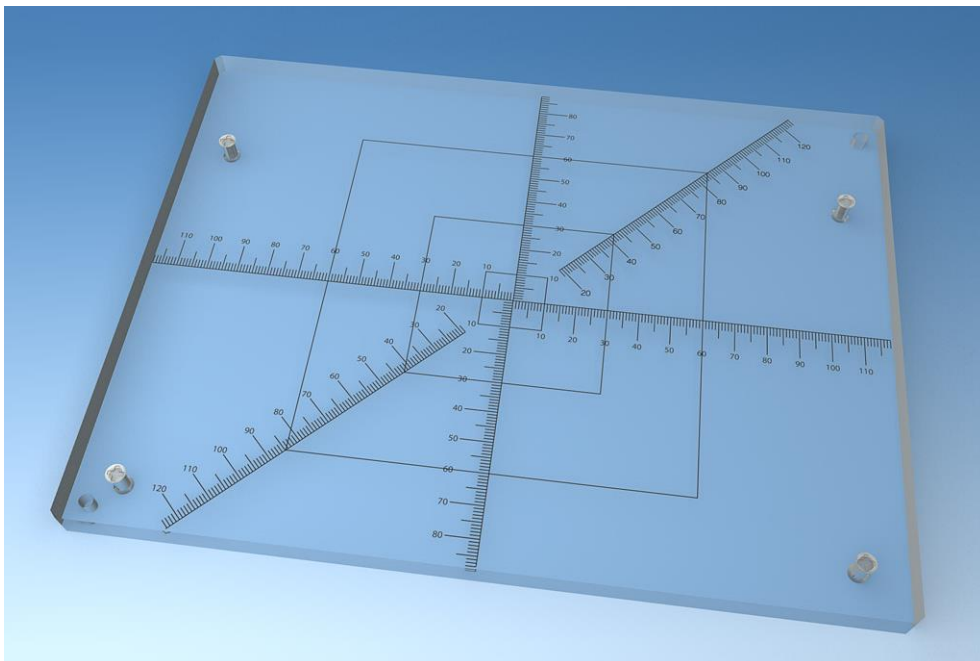
filaments module



MTF module

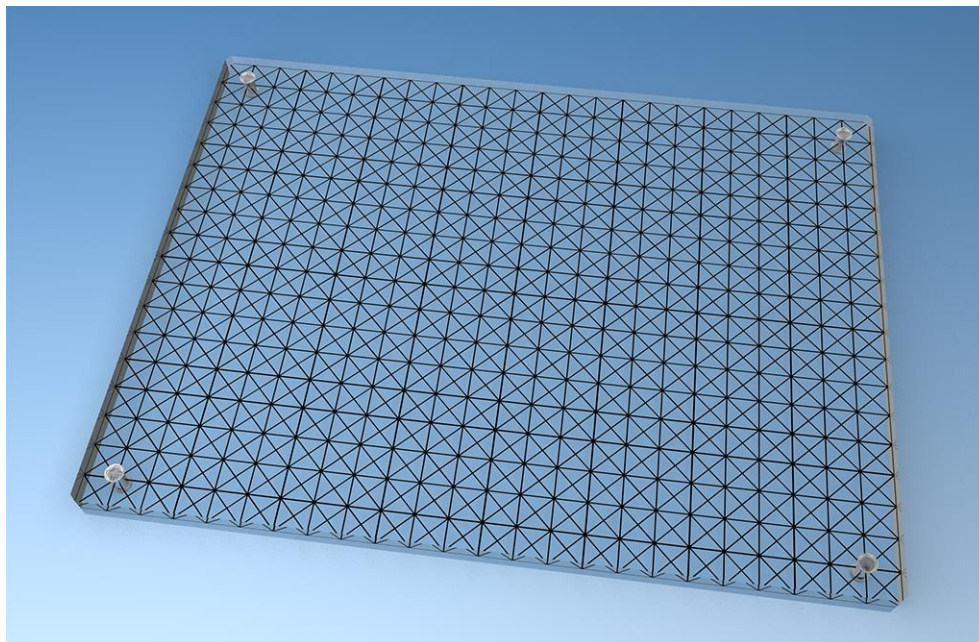


artefacts evaluation module



geometry distortion module (scales)





geometry distortion module (mesh)