

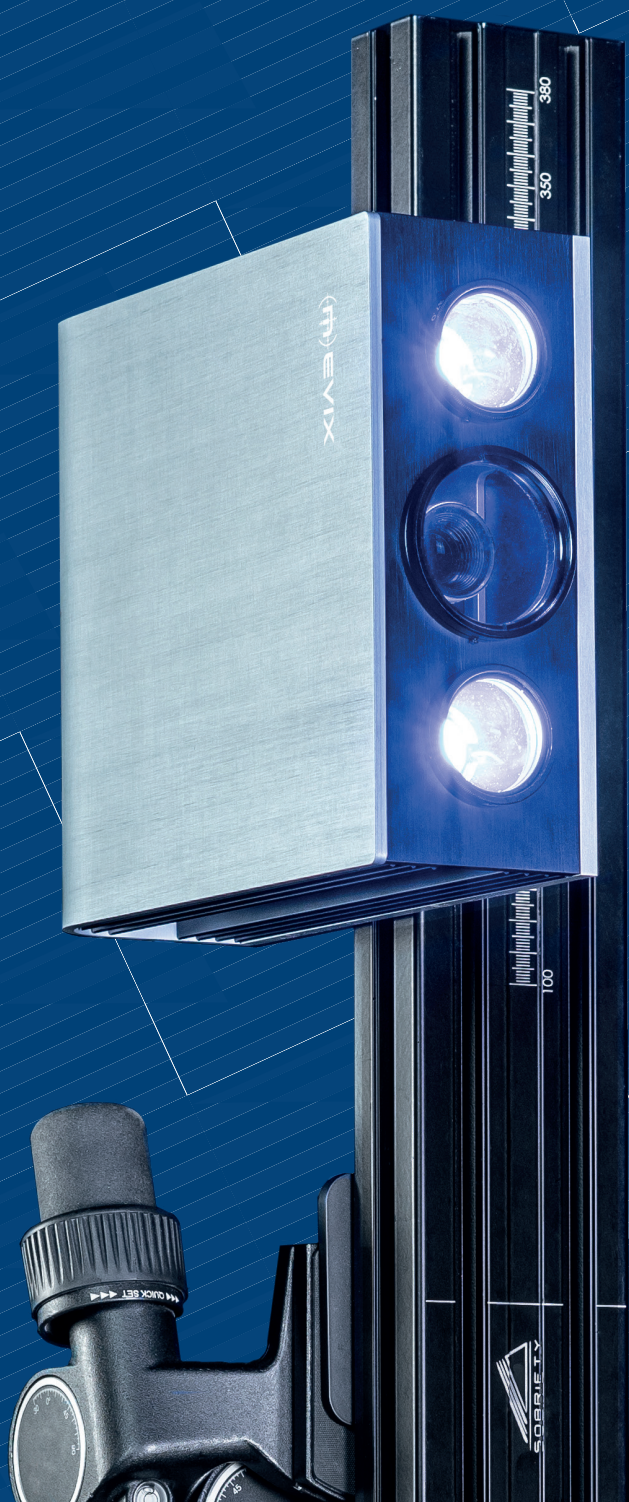
# (M)EVIX

## Videoextensometer

Powered by  
**MERCURY RT DIC Software**

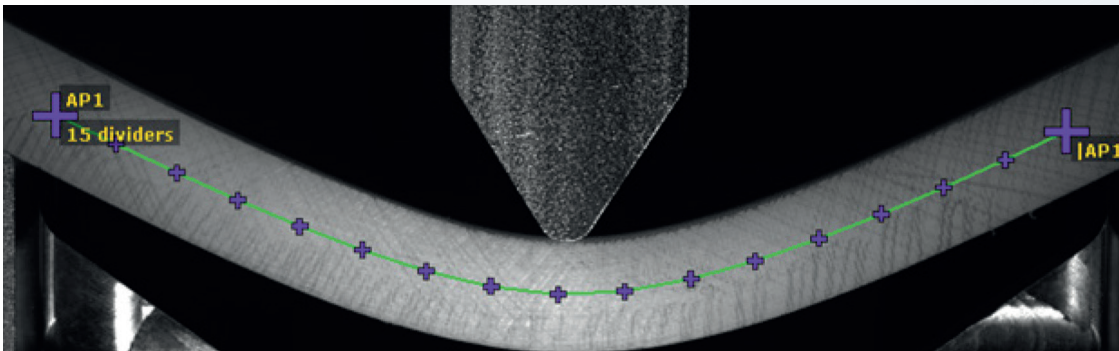
Non-contacting video extensometer for real-time analysis of strain and deformations measurement in industry and research.

- COMPACT „ONE BOX“ SOLUTION
- EASY „PLUG AND PLAY“ INSTALLATION
- USER-FRIENDLY OPERATION
- HIGH-PRECISION MEASUREMENT
- ROBUST DESIGN FOR INDUSTRIAL USE
- MODULAR AND STACKABLE
- ADJUSTABLE FIELD OF VIEW
- EASY CALIBRATION PROCEDURE
- MINIMAL MAINTENANCE

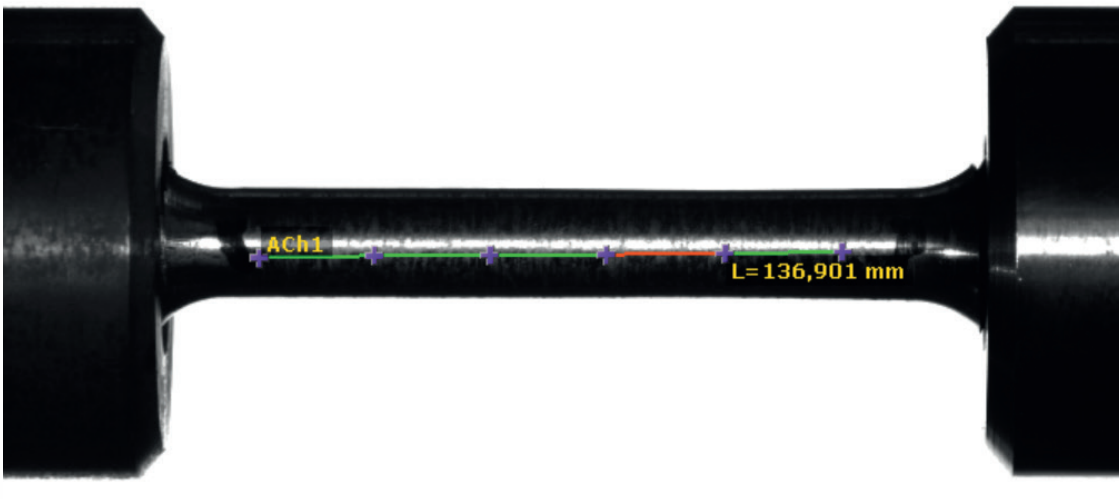


## FUNCTIONALITY

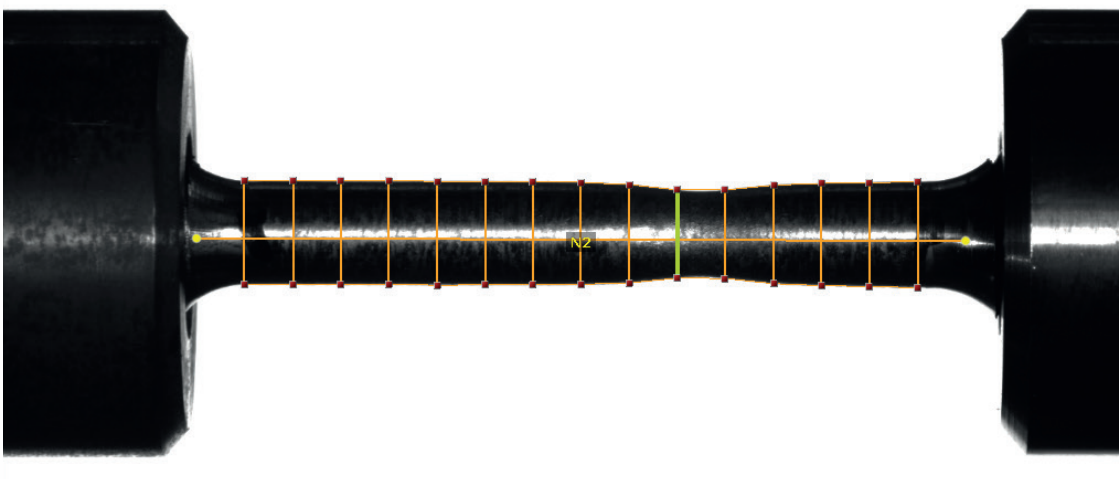
- ▶ Outputs from MEVIX analyses meet the standards EN ISO 9513 and ASTM E83-10a
- ▶ Measuring an unlimited number of points (position, velocity, acceleration)
- ▶ Virtual extensometer
  - ▶ Longitudinal extension and contraction measurement: readings in mm and %
  - ▶ Transversal extension and contraction measurement: readings in mm and %
  - ▶ Allows for calculation of Poisson's ratio and true strain.
  - ▶ Determines stress and true stress and displays a tensile strength diagram if importing data from a testing machine.
- ▶ Virtual strain gauge. It allows for measurement of principal, directional and shear deformations.
- ▶ Deflection detection at three-point bending test (Polyline probe)



- ▶ Intelligent measurement and detection of specimen breakage section (Chain probe)



- ▶ Intelligent transverse measurements and detection of the specimen breakage section (Neck gauge)



- ▶ Determining the centre of gravity of hollow sections and measuring its displacement during specimen deformation.

# PARAMETERS

## CAMERA

Resolution: 5 Mpix, 2456x2054px; 3.45um

Maximum frequency for the entire field of view (@ full resolution): 35fps

Maximum frequency for measuring samples according to DIN 50125: 130fps

## LENSES

	AT321	AT322	AT323	AT324
Weight (g)	74	62	71	84
Thread	M27 x 0.5	M27 x 0.5	M27 x 0.5	M27 x 0.5
THD max (%)	-0,58	-0.3	-0.06	-0.04
M.O.D. (m)	0.2	0.15	0.2	0.4
Focal Length (mm)	16	25	35	50
Diameter x Length (mm)	ø29 x 40.06	ø29 x 37.3	ø29 x 40.06	ø29 x 51

Grade 0.2 according to ISO - 9513 - samples  
@FOV up to 45mm

Focal Length [mm]	Working Distance [mm]
25	135
35	190
50	270

Grade 0.5 according to ISO - 9513 - samples  
@FOV up to 120mm

Focal Length [mm]	Working Distance [mm]
16	230
25	360
35	500
50	715

Grade 1 according to ISO - 9513 - samples  
@FOV up to 240 mm

Focal Length [mm]	Working Distance [mm]
16	457
25	714
35	1000
50	1430

## LIGHT SOURCE:

Wattage: 2 x 10 W

Colour: White

The lights are equipped with polarizing filters

## MOUNTING AND CONNECTION:

Possible mounting using UNC 3/8 threads

Voltage: 230V

## CONNECTORS:

- ▶ USB 3.0 B
- ▶ Synchronization with another MEVIX device

## OUTPUT/INPUT:

- ▶ analogue – DAAD card: USB or PCI Express
- ▶ digital
  - ▶ DOLI binary protocol (start/stop command)
  - ▶ COM port or TCP/IP (digital output for data transfer to customer's device)
  - ▶ Remote control API (two-way communication between the customer's device and MEVIX with the possibility of using predefined commands for controlling MEVIX software)

## DIMENSIONS AND WEIGHT:

Dimensions: 205 x 190 x 85 mm

Weight: 3,5 kg

## APPLICATION

- ▶ Measuring and analysis in 2D employing the DIC method
- ▶ Material testing: tensile testing, compression testing, three-point flexural testing
- ▶ Wide range of tested materials
  - ▶ Steel (EN ISO 6892-1)
  - ▶ Steel reinforcement bars for concrete (ISO 15630-1)
  - ▶ Plastic (ISO 527-1, ISO 178)
  - ▶ Rubber, composites, fibrous materials, wood, concrete
- ▶ Tested products:
  - ▶ Fasteners and anchoring elements
  - ▶ Ropes, wires, cables
  - ▶ Tensioning belts
  - ▶ Construction components
- ▶ Distance of the device from the tested specimen
  - ▶ Specimen length 100 mm
    - ▶ Lens 16 mm: 190 mm
    - ▶ Lens 25 mm: 300 mm
    - ▶ Lens 35 mm: 415 mm
    - ▶ Lens 50 mm: 590 mm
  - ▶ Specimen length 200 mm
    - ▶ Lens 16 mm: 380 mm
    - ▶ Lens 25 mm: 600 mm
    - ▶ Lens 35 mm: 830 mm
    - ▶ Lens 50 mm: 1190 mm
- ▶ Measuring long specimens while maintaining high accuracy
  - ▶ Specimen length 200mm, accuracy Class 0,5      2 MEVIX modules
  - ▶ Specimen length 400mm, accuracy Class 1      2 MEVIX modules
  - ▶ Specimen length 600mm, accuracy Class 1      3 MEVIX modules

**Pre-release information:** technical specification subject to change.

### HEADQUARTERS

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