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GUVERNUL ROMÂNIEI



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Micro - Particle Image Velocimetry Measuring System

Micro - PIV System from Dantec Dynamics

MICRONANOFAB

GENERAL DESCRIPTIONS:

- ✓ Particle Image Velocimetry (PIV) is a robust technique for measuring fluid velocity.
- ✓ Workstation for microscopic imaging applications.
- ✓ The method is an optical, non-intrusive technique measuring the movement of small tracer particles by means of a camera and pulsed laser light.
- ✓ With this technique the flow velocity fields are mapped in 2D.

APPLICATIONS:

- ✓ Mapping concentration or temperature distributions in micro-flows.
- ✓ Measurements in microfluidic systems in chemistry, bio-chemistry, medical devices, DNA analysis, electronic cooling systems, micro-mechanical systems, micro total-analysis systems.
- ✓ Imaging-based measurements in microfluidic systems.



SYSTEM ARCHITECTURE:

- ✓ Microscope
 - Hi-Performance Leica Inverted Microscope.
- ✓ Acquisition and control units
 - 80N77 Timer Box
- ✓ Camera
 - Hi-Sense 4M cooled camera
- ✓ Illumination
 - Micro-Strobe. Green.
 - Dual-Power 65-15 Laser 2x65 mJ at 15 Hz, 532 nm

www.imt.ro/MICRONANOFAB

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