

# Olympus i-Speed 2 high-speed camera

Olympus i-Speed 2 is a compact, mobile, autonomous colour camera suitable for recording very fast and short-period, transitional and/or stochastic processes. Available accessories are: image digitalizer, laptop and other equipment for video recording, processing and analysis. The camera is widely applicable in research, equipment design, parts/components and material testing.

## **ENERGY INSTITUTE**

Dept. of Thermodynamics and Environmental Engineering

#### SPECIFICATION =

- maximum image resolution 800x600 at frame rate 1000 fps
- maximum frame rate 33,000 fps at resolution 96x72
- ethernet cable PC connectivity
- manual or electronic (TTL 5V) trigger in recording
- possibility to store analogue signal of up to 4 channels in addition to video
- IDT LED lamp (130 W) for supplemental scene illumination
- set of lenses and filters enhance the recording quality





Aerosol streaming from inhaler



### TYPICAL APPLICATIONS

- primary information on flow features in fluid dynamics prior to application of optical measuring methods
- even suitable as main experimental method when studying fluid flow fields
- air flow visualization in research related to room heating, ventilation and air-conditioning
- observation of air/gas discharge from air terminal devices and pipes, nozzle discharge, two-phase flow
- assessment of indoor environment of vehicles
- studies of flow around bodies, mixing of gas jets
- crash tests, fast motion tracking of objects, firearms/ammunition/explosives testing
- research in biomechanics and on biological processes
- evaluation of trajectories of machine mechanisms, robotic production lines, high-speed machining etc.
- research on combustion processes

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