

# FlowMaster Educational

**FlowMaster Educational** is a pre-designed measurement system for teaching and using the PIV technique under reproduceable conditions. This system offers a perfect way for students to get familiar with the technology and to do measurements on their own or in small groups. The system uses an eye-safe LED illumination and provides reliable and accurate results. It allows measuring and analyzing various flow phenomena with high performance.



## Components

# FlowMaster Educational PIV system consists of



- Imager MX 2M-160 CMOS camera with 1920 x 1200 pixel, 155 fps, 8,10,12 bit, USB 3.0
- high resolution lens
- ▶ LED illumination and light sheet optics



- computer (i5, 16 GB) including timing unit PTU X pre-installed on the computer
- ▶ DaVis 10 with FlowMaster Educational software package

The **FlowMaster Educational** software included in the system is a full-fledged DaVis license with standard 2D-PIV package.

# Experimental setup

The experimental water jet setup is the perfect addition to the **FlowMaster Educational** system. It contains



- a stable mechanical frame with a water tank
- pump and nozzle producing steady, pulsed or periodic jet flow

## **LaVisionUK Ltd**

# LaVision Inc.



#### **Dimensions**

The water jet setup has a space-saving design. The complete system is movable, ensures high flexibility in the laboratory and the compact system combines all necessary components in a small footprint.

- built-up system 100 x 80 x 150 cm<sup>3</sup>
- > system in stand-by 100 x 40 x 150 cm<sup>3</sup>
- water tank 100 x 40 x 40 cm³



#### Measurements

**FlowMaster Educational** allows the analysis of various flow types. Pulse type and pumping speed of the water jet are variable and create a variation of water streams.

The resolution and image section of the camera system enable detailed, precise and time-resolved analysis of flow structures and speed in a vertical plane.

## **Analysis**

DaVis **FlowMaster Educational** is a compact software package managing the experiments and provides a safe and instructive way to record and analyze datasets.

# Ordering information

Part number	Description
1106250	FlowMaster Educational PIV system
1106251	Experimental water jet setup

Data provided by LaVision is believed to be true. However, no responsibility is assumed for possible inaccuracies or omissions. All data are subject to change without notice.

Sep-20

## LaVisionUK Ltd