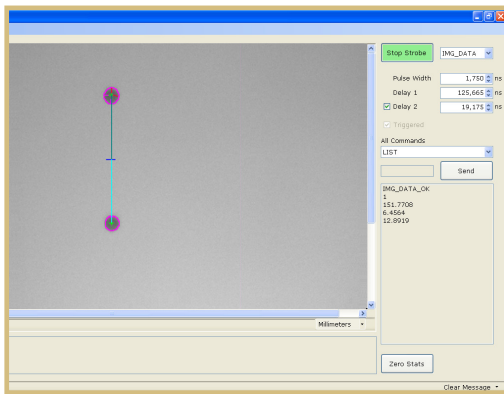


JetXpertOEM for Integration into Printing Systems

Self-contained Drop-in-flight analysis for integration into printers



FEATURES AND BENEFITS

A self-contained drop-in-flight analysis system designed for integration into printing systems.

Measurements of drops include:

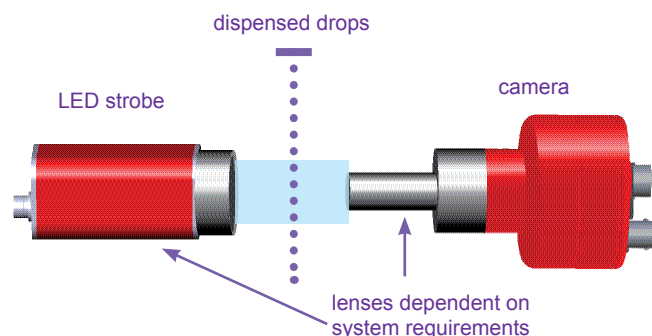
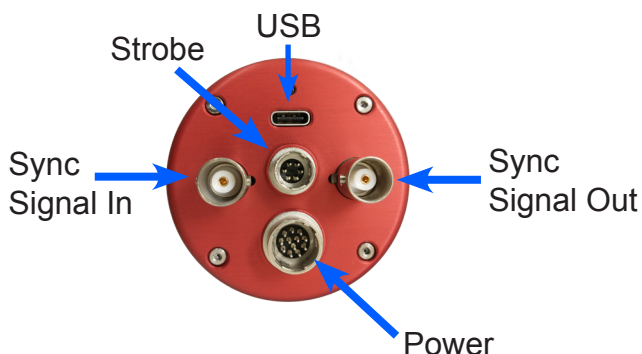
- Drop Volume
- Drop Velocity

Applications:

- Visualize drop formation
- Test system stability over time
- Understand how drops vary with frequency and waveform

- Very compact, economical solution
- Connect via 4 simple cables
- Accurate and repeatable measurements of drop volume and velocity
- High powered LED strobe plus digital camera with configurable optics
- Single event imaging, for capture of individual drops, satellites, mist, and other transient effects.
- Works with any frequency-based dispensing technology that ejects free drops
- Runs on included PC laptop, no special hardware required

Camera Connections:



JetXpert benefits include:

- Fully integrated unit
- Designed to be integrated into printing and deposition systems for verification and control
- Drop visualization and analysis
- Custom configurations are available

Strobe-based Capture System

JetXpert uses a synchronized strobe positioned behind dispensed droplets and a camera in front to capture images of drops in flight in silhouette, allowing for evaluation of translucent and opaque fluids.

Strobing is slaved to the dispensing head drive frequency or external frequency generator.

System Optimization

Measuring the in-flight characteristics of fluid droplets under different conditions can aid in optimizing dispensing system settings, fluid formulation and system performance. Manufacturers of print heads, dispensing tips and heads, driver electronics and actuators, fluids, and integrated material deposition systems can benefit from analysis of drops-in-flight.

System Configuration

Light source	High-powered LED strobe, proprietary lens for maximum image brightness
Camera	Digital camera, 2592 x 1944 pixels, with onboard strobe control
Lens	Fixed focal length lens. Resolution dependent on application requirements.
Calibration	Factory calibration for OEM units
Strobe pulse width	100ns to 1000ns (1 μ s) in increments of 50ns
Analysis	Built-in analysis for drop volume and velocity
Sync signal	Nominal TTL (0-5VDC) input signal via print head firing signal or external signal generator. Accepts input (low) between 0-1V, and input (high) between 2.5-5V.
Frequency range	Minimum: <1Hz Maximum: 100kHz, 50% duty cycle
Data	Includes PC based GUI with graphical feedback and automatic data reporting to file

Learn more at www.jetxpert.com

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Drop-in-flight analysis for OEMs