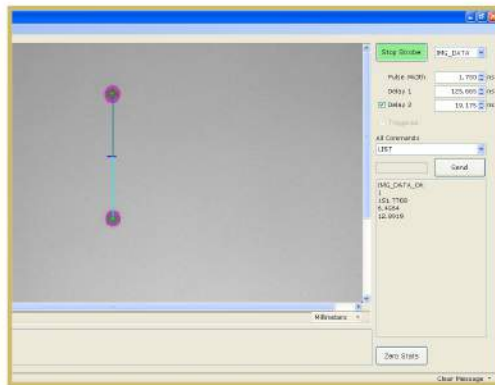


JetXpertOEM for Integration into Printing Systems

Self-contained Drop-in-flight analysis for integration into OEM applications



FEATURES AND BENEFITS

A self-contained drop-in-flight analysis system specifically designed for OEM integration into ink, printing, and deposition systems.

- Available for high volume applications
- Very compact, economical solution for integration into dispensing equipment
- 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 strobe event for imaging and analysis of single drops
- Works with any frequency-based dispensing technology that ejects free drops
- Controllable over network via TCP
- .NET controls for simple software integration

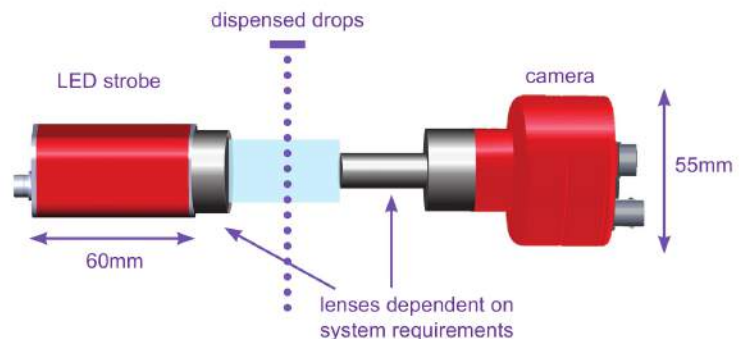
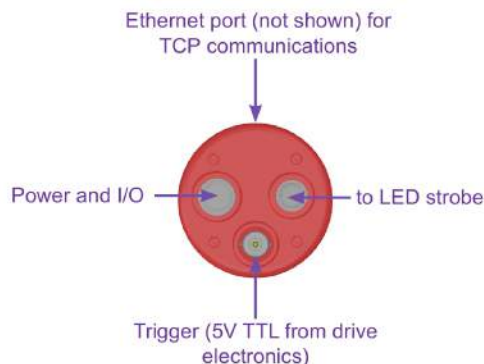
Measurements of drops include:

- Drop Volume
- Drop Velocity
- Missing Jets

Applications:

- Visualize drop formation
- Test system stability and variation
- Test drop volume vs. drive frequency

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, 752 x 480 pixels, on-board processing and 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 10ns
Analysis	Built-in analysis for drop volume and velocity
Sync signal	TTL (5VDC) input signal via print head firing signal or external signal generator
Frequency range	Minimum: <1Hz Maximum: 100kHz, 50% duty cycle
Data	Can be ported via TCP over Ethernet

System ships with simple GUI using JetXpertOEM controls for .NET. Sample code examples are provided to assist integration.

Learn more at www.jetxpert.com

imageXpert

www.jetxpert.com

Email: info@imagexpert.com

Tel: 603-598-2500

Fax: 603-598-2687

Drop-in-flight analysis for OEMs