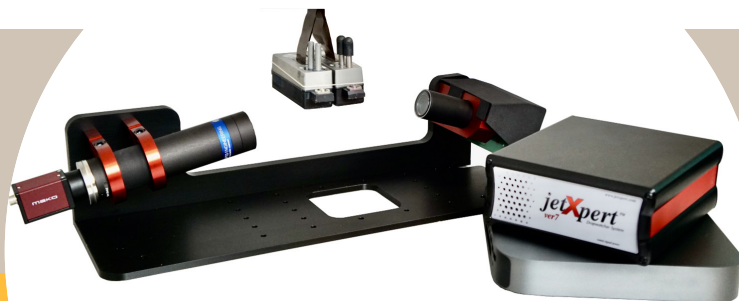


Inline JetXpert Drop Watcher

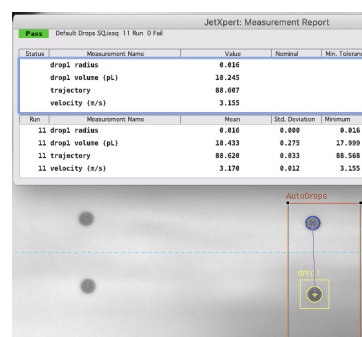
Fully integrated drop-in-flight analysis system for use inside a printer



FEATURES AND BENEFITS

Characterize performance and drive optimization of ink, printing systems and deposition systems

- Works with any print head including Dimatix, Xaar, Kyocera, Ricoh, Toshiba Tec, Konica Minolta, Seiko Epson, Xerox etc.
- Angled optics allows for drop-in-flight analysis with larger print bars containing multiple printheads
- Single drop imaging and analysis
- Accurate and repeatable measurements
- Ability to collect statistical data
- Small footprint for lab and production environments



Measurements of drops include:

- Velocity
- Volume
- Trajectory
- Visualization of drop formation
- Ligament length

System configuration

Pulse width	Selectable 150ns, 250ns or 500ns minimum pulse width with 125ns, 250ns or 500ns increments respectively
Pulse options	Single event imaging, with single and double drop capabilities. Aggregate image available
min. and Max input frequency	Minimum: <1Hz; Maximum: 130kHz at 50% duty cycle Ongoing development may increase range
Input signal options	TTL (5V) up to 10V input signal via firing signal or external signal generator
Strobe light intensity	Intensity is set at optimal value at the factory, but it is variable and can be set by user
Image/movie capture	Images (.TIFF), image series and movies (.AVI) can be captured and saved
Interface	Strobe parameters set via GUI (or ImageXpert task) and communication via RS232. Digital control of settings for repeatable drop imaging and analysis
Camera	Black and white GigE camera, 1292 x 964 pixels, manual focus
Lens and optical resolution	Fixed optical magnification and focal length. Optical resolution 1.5 microns per pixel
Calibration	Calibrated in the factory before shipment
Analysis	Imagexpert image analysis software
Print head electronics	Drive electronics can be provided by ImageXpert by the customer