The IAS-1000L is an automated label print quality analysis system ideally equipped to analyze strips or continuous rolls of labels in a broad range of sizes. Performing objective measurements automatically, efficiently and consistently, it eliminates the need for subjective visual inspection and tedious manual measurements.

Labels are inspected and analyzed sequentially to quantify print quality, identify defects and report quality statistics for design verification, process control, and quality management purposes. The IAS-1000L is an ideal tool both for research and development and for production environments.

The compact desktop design comprises a transport system, light source, and camera for label image capture. The system uses QEA’s advanced IASLab® image analysis software for motion control, analysis of critical image features, real time pass/fail decisions, archiving of measurement results and statistics, and generation of quality management reports.

The IAS-1000L is a powerful, flexible system that is easy to use not only by experts but by less-experienced operators responsible for routine testing.

The IAS-1000L delivers consistent, quantitative, operator-independent measurements—quickly, reliably and repeatably.

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FUNCTIONS AND FEATURES
- Automated or interactive analyses with IASLab®, the IAS-1000L’s advanced image quality analysis software platform
- Analysis of real-time or saved images in a wide range of image file formats
- Test sequence programming with a graphical user interface
- All measurements in calibrated, physical units including spatial dimensions, reflectance, optical density and color
- Numerical results saved to a CSV text file and images to bitmaps
- User-selectable results formats; zoom and color channel display

ANALYSIS TOOLS AND ATTRIBUTES
- Dot (blob) quality analysis (size, shape, x-y locations, dot%, and screen angle)
- Line, edge and text quality analysis (line width, blurriness, raggedness, density, contrast, fill, location, and orientation; line attributes analyzed per ISO-13660 where applicable)
- Solid area attribute measurements (density, reflectance, L*a*b*, tone reproduction, gradient, graininess, mottle and background; area attributes analyzed per ISO-13660 where applicable)
- Graphics quality (size, density, color, uniformity)
- Defect detection (void analysis)
- Barcode reading tool (available as option)
- Barcode verification (Code 128 and 39; available as option)
- OCR tool available as option
- Real-time pass/fail reporting (determination based on user-specified limits)

TYPICAL APPLICATIONS
For prints produced by digital or other printing technologies:
- Research and development
- Incoming inspection
- Process monitoring and development
- Quality control
- Diagnostics and problem-solving
- Quality management

LABEL DIMENSIONS AND PROCESSING TIME
- Optimized for continuous strips or rolls of labels ranging from \( \frac{1}{8} \) “ to 4 ½ “ in width; length unlimited; thickness up to 2mm
- Typical throughput is on the order of 20 to 30 labels per minute. However, processing time varies significantly depending on factors such as the size of the label, the spacing of the labels on the strip, the number of measurements on each label, and the complexity of the analyses performed.

SYSTEM COMPONENTS (QEA-SUPPLIED)
- IASLab control software
- Enclosure with label transport mechanism, transport guides, camera, light source
- Transport mechanism including motorized drive rollers and positioning guides
- Calibration targets
- All necessary cables and connectors

MINIMUM PC REQUIREMENTS (CUSTOMER-SUPPLIED)
- PC running Windows® 7 to 10, 64-bit (with Microsoft Office Professional® including Excel 2007 or later, recommended)
- RAM: 8GB or more
- CD-ROM drive
- Two USB 2.0 ports

ELECTRICAL REQUIREMENTS
- 110 Vac±10% @ 50/60 Hz or 230 Vac±10% @ 50/60 Hz

OPERATING ENVIRONMENT
- Temperature: 10 to 32 C (50 to 90 F)
- Relative humidity: 20% to 80% (non-condensing)

DOCUMENTATION
- Quick Start Guide
- User’s Guide

** Specifications subject to change without notice. Rev. 160309**