



Making Precise and Objective Decisions on Image Quality Has Never Been This Easy



# Tough Decisions Can Be Made Easily Using The Personal IAS ... Anytime, Anywhere ...

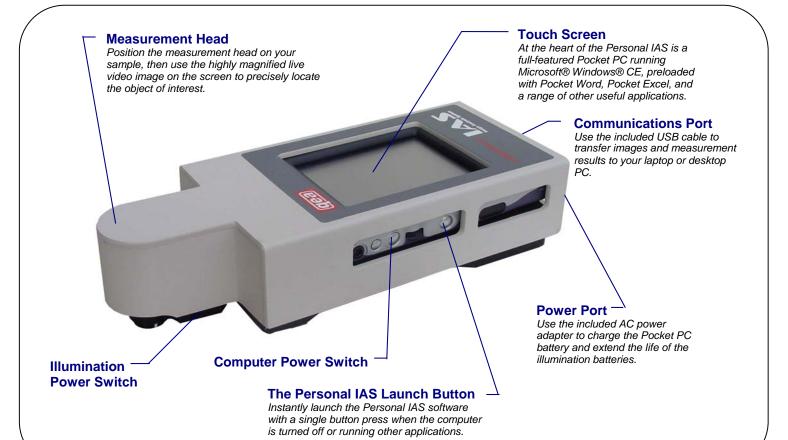
The Personal IAS\* is a precise image analysis tool that will revolutionize the way you evaluate image quality. Gone are the days when you have to guess at what the level of image quality really is. Gone are the days when you have five inputs from five people and they all differ. Gone are the days when the assessment at 9 AM differs from that at 5 PM. Gone are the days around the table with the never-ending debates on how everybody feels and how everybody perceives image quality. The Personal IAS provides unambiguous, objective assessment, turning adjectives into numbers and eliminating the pain of subjective image quality assessment.

The Personal IAS integrates a high resolution digital microscope and a pocket size computer into a versatile high performance measurement instrument. With the Personal IAS, you can capture an image, perform complex analyses and obtain the results within seconds. Why wait for a specially trained laboratory technician to make measurements with complicated instruments when you can get reliable results immediately in the field or without leaving your desk? With the Personal IAS, you have the flexibility and freedom to get critical information when and where you need it.

\*PATENTS PENDING



# **Getting To Know the Personal IAS**

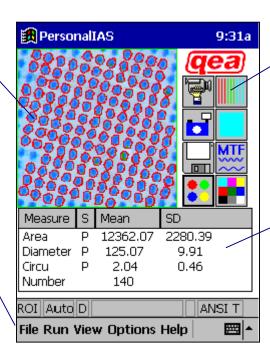


#### **Image Window**

A live video image is displayed while positioning the instrument for reliable object location. When a measurement is initiated, a single frame of the object is captured and enhanced with overlays to highlight features. Point-to-point measurements can be made and region of interests can be defined by drawing directly on the image window of the touch screen.

#### **Advanced Features**

The main window of the Personal IAS software provides all the controls and displays necessary for easy "one-tap" operation. But for advanced users, a powerful set of configuration and analysis tools is accessible through the comprehensive menus.



#### **Measurement Buttons**

With a single tap on the touch screen, the software performs the analysis and reports the measurement results. Measurement buttons can be reassigned by the end-user according to the test functions you use most frequently.

#### **Results Display**

Results are displayed immediately and directly on the main screen, including simple statistics (mean and standard deviation). The results list can be re-configured by the end-user to display the metrics you need in any order you prefer.

# **System Specifications**\*

## **Physical Specifications**

Description:	Portable digital microscope and print quality analyzer
Size:	23.1 cm (l) $\times$ 9.4 cm (w) $\times$ 5.3 cm (h) [9.1" (l) $\times$ 3.7" (w) $\times$ 2.1" (h)]
Weight:	850 grams [0.85 kg]
Display:	Hyper amorphous silicon TFT 65,536-color LCD (320 × 240)
Accessories:	Hard-sided carrying case AC-power adapter USB cable User's manual & test target Backup software
Power requirements:	Rechargeable battery for analyzer 4 AA batteries for illumination AC-adapter included

## **Technical Specifications**

Measuring geometry:	Broadband diffuse illumination; ≥45° / 0° viewing	
Detector:	Color CCD	
Resolution:	5 µm per pixel	
Aperture size:	2.4 mm × 2.4 mm	
Screen Ruling:	Range: 18 - 236 l/cm [45 – 600 lpi] cm or inch selectable	
Minimum Dot Size:	10 µm diameter	
Print Substrates:	Paper, offset and other reflective plates	
Repeatability (spatial):	Better than ±2 µm	
Repeatability (optical density):	Better than ±0.05	
Repeatability (dot %):	Better than ±1% at 200 lpi (measured in highlight and midtone)	
Calibration:	Factory calibrated Automatic drift compensation	
Measuring Time:	6 seconds typical (depends on measurement function)	

### **Functional Data**

Management	Dot swellt:		
Measurement:	Dot quality	O'manda a'tu	
	Diameter	Circularity	
	Area	Box Ratio	
	Perimeter  Dot % in halftone (AM and FM)  Line screen and Screen angle  Line quality (uses ISO-13660 methods)		
	Line width	Fill	
	Line density	Angle	
	Blurriness	Distance	
	Edge raggedness	Discontinuity	
	Contrast	( 100 40000	
	Area quality (uses ISO-13660 metho		
	Reflectance	Graininess	
	Visual Density	Mottle	
Color L*a*b* and Density			
	Tone reproduction		
	Reflectance	Dot %	
	Density	(Murray-Davies)	
	% Area coverage	Print contrast	
	Gray balance		
	Image defects		
	Satellites	Intercolor bleed	
	Voids	Banding	
	Extraneous marks	Ghosting	
	Background/GS	Slur	
	Text quality Stroke width Stroke density Edge raggedness MTF (modulation transfer function)		
	Fusing quality		
Software	ROI based analysis on live or stored image		
features:	Two-point distance measurement		
	Auto/manual color plane selection Auto line orientation detection Auto dark/light dot detection User configurable push buttons Pass/fail tolerances		
	Statistics and graphical	plots	
Data storage &	PC-compatible files of ra	w data and analyzed	
handling:	results (data logging or individual data saving		
	Saving and retrieval of captured images ActiveSync file transfer with laptop or PC		
	Personal IAS Excel Link	(optional)	

<sup>\*</sup>All specifications subject to change without notice. (Rev. 4/03)

