Imatest Master
Image quality analysis software

Why Choose Imatest Master?

In today's imaging industry, companies are pressured to produce high-quality cameras with the newest features. Yet, new features also mean the necessity for regular updates so industry standards are always met. Imatest Master streamlines this challenging process by providing state-of-the-art software that is regularly reengineered to meet customer requirements. In addtion, Imatest Master can test nearly any conceivable type of camera for over a dozen image quality factors, including sharpness, noise, dynamic range, and color accuracy.
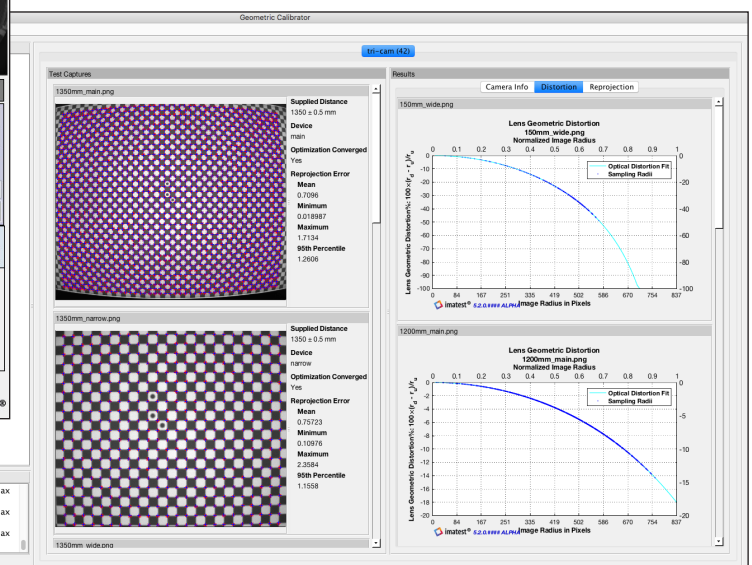
> " *We decided to leverage Imatest, a de facto industry standard, instead of developing our own image quality testing metrics.* "
>
> *Signal Processing Software Manager at a Leading Semiconductor Firm*
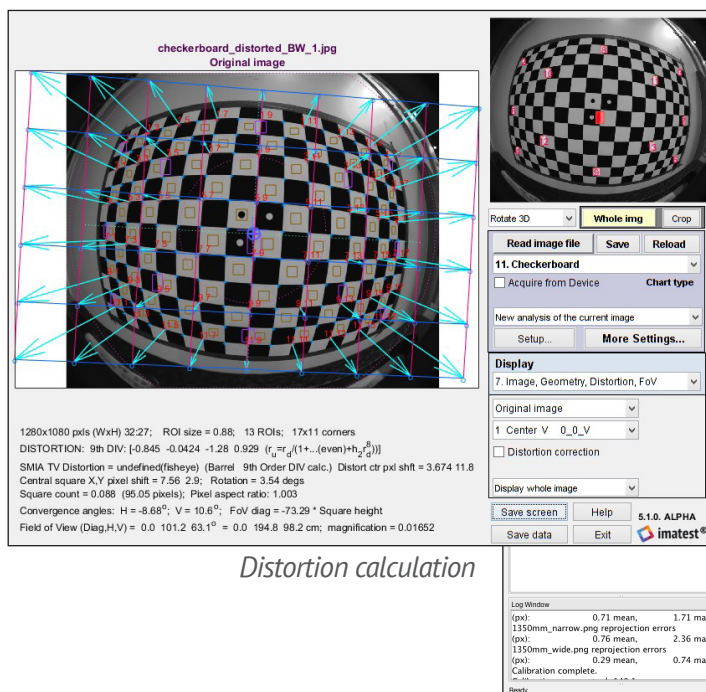
Distortion calculation

Geometric calibration

Highlighted Features

✔ **eSFR ISO** tests numerous image quality factors with a single multifeature test chart.

✔ **Arbitrary Charts** can automatically test your own custom chart.

✔ **Image Acquisition** acquires images in real time from various sensors and cameras.

✔ **Test Manager** organizes a set of modules to run with user-defined test plans and stores results in a database.

✔ **Reports** feature creates custom interactive reports with the results you define.

Benefits of Imatest Master

✔ Imatest Master is the industry standard for communicating image quality results and is more reliable and cost-effective than creating in-house software.

✔ Automatic recognition of common chart features like the multifeature SFRplus and eSFR.

✔ ISO 12233:2017+ charts greatly reduce the amount of time needed to measure many image quality factors.

✔ Test Manager, Database, and Reports features allow companies to set up repeatable comprehensive test plans and communicate relevant results.

Imatest IT
Industrial testing

Why Choose IT?

Imatest Industrial Testing (IT) software integrates key Imatest Master modules as software components into an existing testing program. With Imatest IT, test results are consistent throughout the manufacturing process. Imatest IT also resolves potentially biased results generated by a supplier's in-house testing system by integrating the same specifications set during the design process.
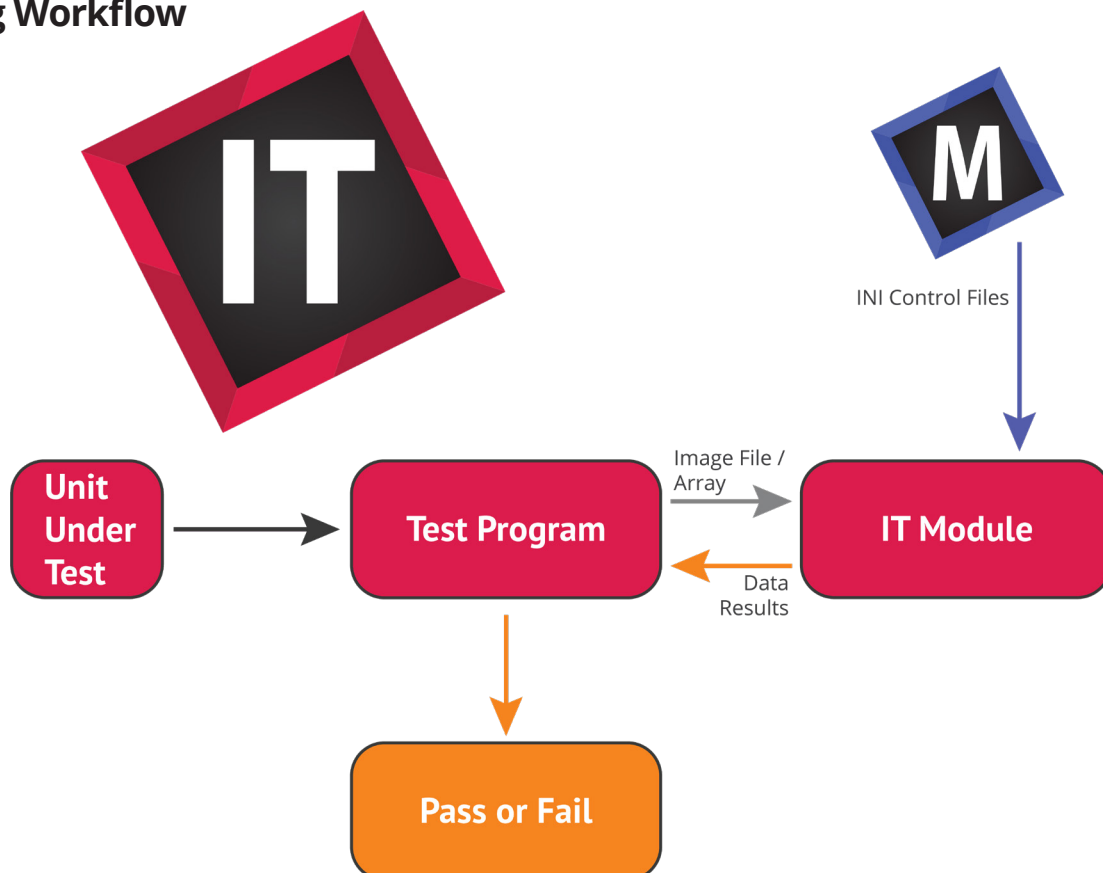
> " *Imatest IT provides us with a gaugeable test platform from start to RMA [Return Merchandise Authorization]. We found that of all our camera module suppliers, those who follow our recommendation to use Imatest throughout their manufacturing process are the ones that perform the best.* "

Camera Engineering Lead
Fortune 100 mobile device manufacturer

IT Testing Workflow

INI Control Files

Image File / Array

Unit Under Test → Test Program → IT Module

Data Results

Pass or Fail

Highlighted Features

✔ **Pass/Fail Specification** lets you define required quality levels for a camera.

✔ **SFRplus** chart analysis allows for a complete map of sharpness nonuniformity, unlike many manufacturing tests that limit sharpness checks to the center and corners of an image.

✔ **Even Field Test** detects blemishes on the sensor, measures color and illumination non-uniformity, and identifies defective pixels.

✔ **Calibrate** signal processing with the results of color and illumination uniformity tests on each module and correct for the uniqueness in each camera.

✔ **Maximize** efficiency by completing camera quality-assurance tests with just three images: SFRplus chart, light even field, and dark even field.

Benefits of Imatest IT

✔ Detects problems early in the manufacturing process and prevents costly yield losses down the line by inspecting the sensor and lenses before completing the camera module and final device assembly.

✔ Allows your business to safely balance fast production and product quality by automating processes that were performed manually.

✔ Eliminates potentially biased results generated by a supplier's in-house testing system.

✔ Prevents the need for correlation of supplier test results by using the same Imatest algorithm and charts in production as in R&D.

*Integrates with production machines*

Imatest Ultimate
Activating Imatest IT along with Imatest Master

Why Choose Ultimate?

Imatest Ultimate combines the analysis suite of Imatest Master and the automated testing of Imatest IT. This combination enables engineers to refine settings while integrating Imatest's software library with their factory or lab control systems without managing multiple licenses or computers. Imatest Ultimate offers our complete software capabilities within a single license. Contact sales@imatest.com for more information.
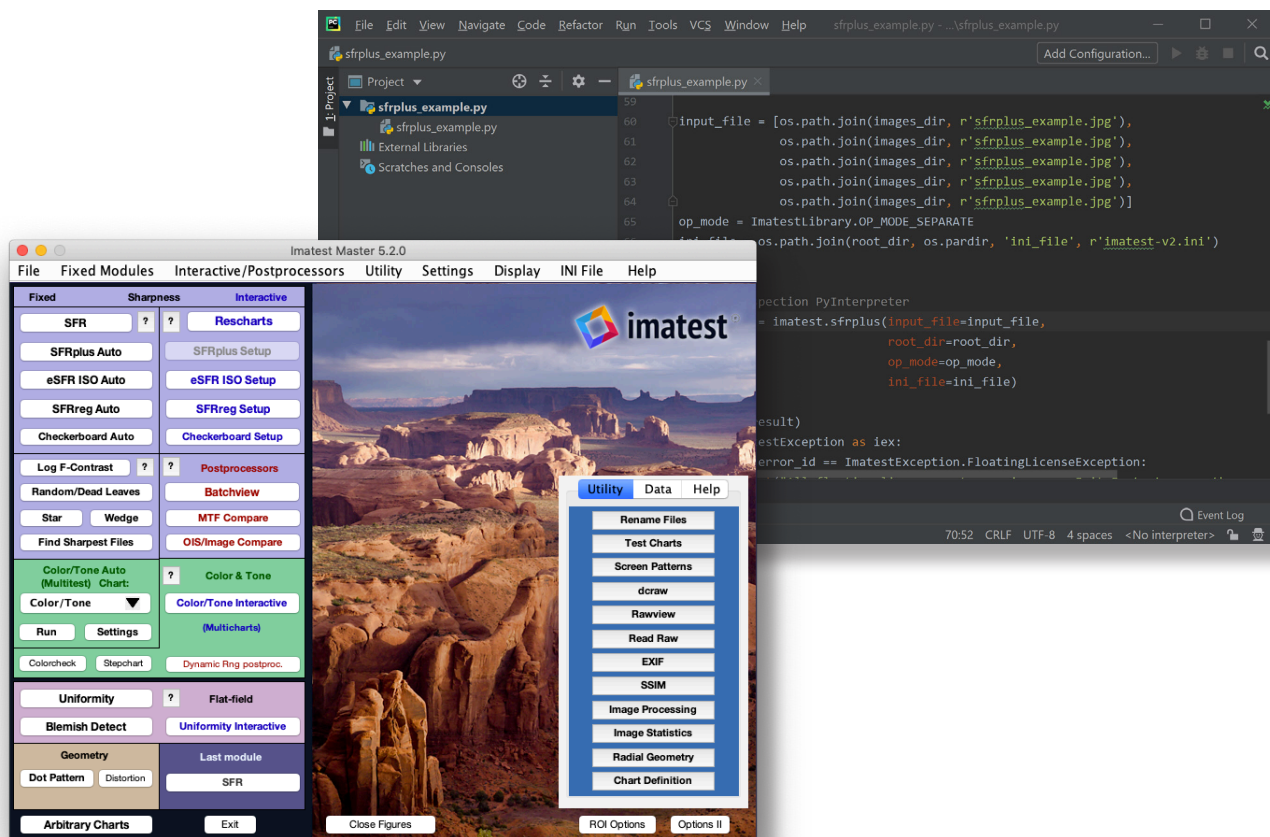
Imatest License Information
Find the right tools for image quality testing

Depending on the number of users in your organization, Imatest offers two license types
as well as volume discounts.

Node-Locked License

A node-locked license can be installed on multiple computers, but activated on just one computer
at a time. A user must deactivate the license before it can be reactivated on a different computer.
Note that a node-locked license can be upgraded to a floating license.

Floating License

A floating license is a flexible option offered with all Imatest license types. A floating license allows
a set number of user "seats" to share the software across a number of computers. For example,
a license purchased to allow four simultaneous activations can be installed on more than four
computers, and it allows for easy transition of the four active users among installations.

Volume Discounts

We offer volume discounts to organizations that purchase four or more licenses in one order.
Contact sales@imatest.com for details.

Imatest Software	User Interface	Image Acquisition	Automation Library	Parallel Processing
Master	✓	✓		
IT		✓	✓	✓
Ultimate	✓	✓	✓	✓