

## MULTI-FUNCTIONAL OPTICAL MEASURING SYSTEM MODEL 7505-05

Recent advancement in optical inspection technology continues to find its path into a variety of market applications. Innovative automated optical testing has become essential and indispensable in areas such as effective dimensional measurement to ensure product manufacturability and process control.

Traditional measurement utilizes different tools and equipment to conduct random inspections manually. These methods are generally time-consuming and complicated for data collection. Chroma now offers an innovative automated optical test system designed specifically for multi-dimensional measurement.

Chroma 7505-05 multi-functional optical measuring system is designed for the automatic testing of optical image quality for smartphone metal cases, batteries, cover glasses and other products. This system architecture utilizes high and ultra-high resolution cameras as well as laser scanners to capture images. A concept similar to the reverse engineering theory is applied to the measurement using 2D and 3D probe to provide full data analysis.

Equipped with a newly patented high-speed flow channel measurement technology,

this system acquires multi-dimensional measurement of the unit under test by moving it through the conveying table from right to left in high speed.

The Chroma 7505-05 measuring system is integrated with a high efficiency optical master system software primarily for measuring dimensional range of the unit under test. User can set detection area with upper and lower limits. A measured dimension histogram that shows the quality of each test item, along with the SPC control chart, can be displayed if selected on the software main screen. This system also has a report storage function that saves test data of each device and provides immediate data collection, statistics, as well as process monitoring information. The advantage of having such real-time process control ability allows early detection of potential problems while improving process efficiency and competitiveness.

Combining both 2D and 3D high-speed real-time measurement capabilities, the Chroma's 7505-05 multi-functional optical measuring system will provide a valuable and effective metrology tool for your production environment.

## MODEL 7505-05

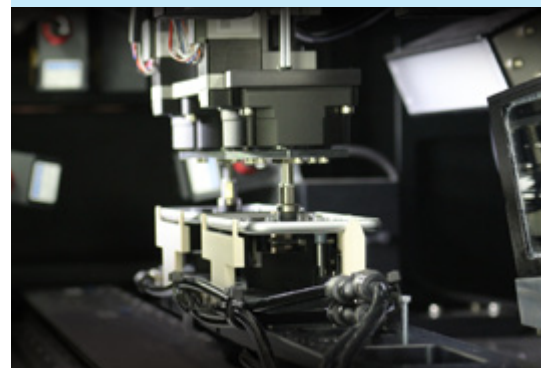
### KEY FEATURES

- Applicable for metal case, battery and cover glass quality check
- 2D & 3D Measurement
- 2D - High resolution camera  
(Repeat accuracy  $\leq 10\mu\text{m}$ )
- 3D - Laser scanner  
(Repeat accuracy  $\leq 10\mu\text{m}$ )
- Maximum measurable area  
160 mm x 145 mm x 16 mm (Approx.)
- High-speed flow channel measurement  
(New Patent) (High Speed  $< 2.5 \text{ sec./unit}^*1$ )
- Instant statistical histograms  
(Real-time quality monitor)
- SPC analysis
- CNC blade pattern removal  
(Applicable before sandblasting)

### APPLICATIONS

- Smartphone metal case
- Battery
- Cover glass
- Vehicle back mirror measurement

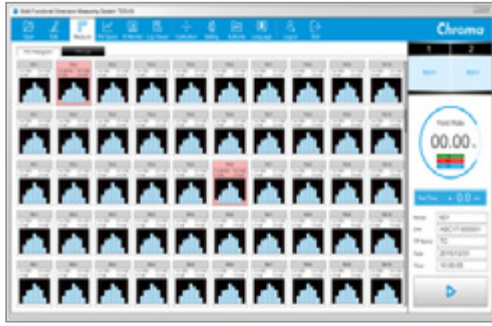
\*1: Based on Chroma's test conditions



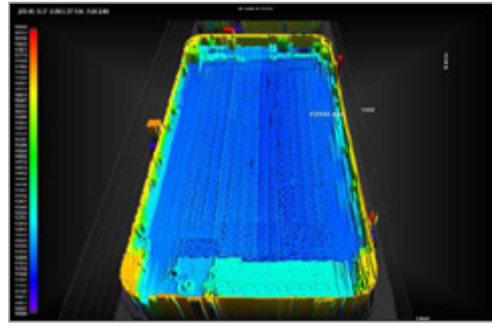
**Chroma**

## OPTICAL MASTER SYSTEM SOFTWARE

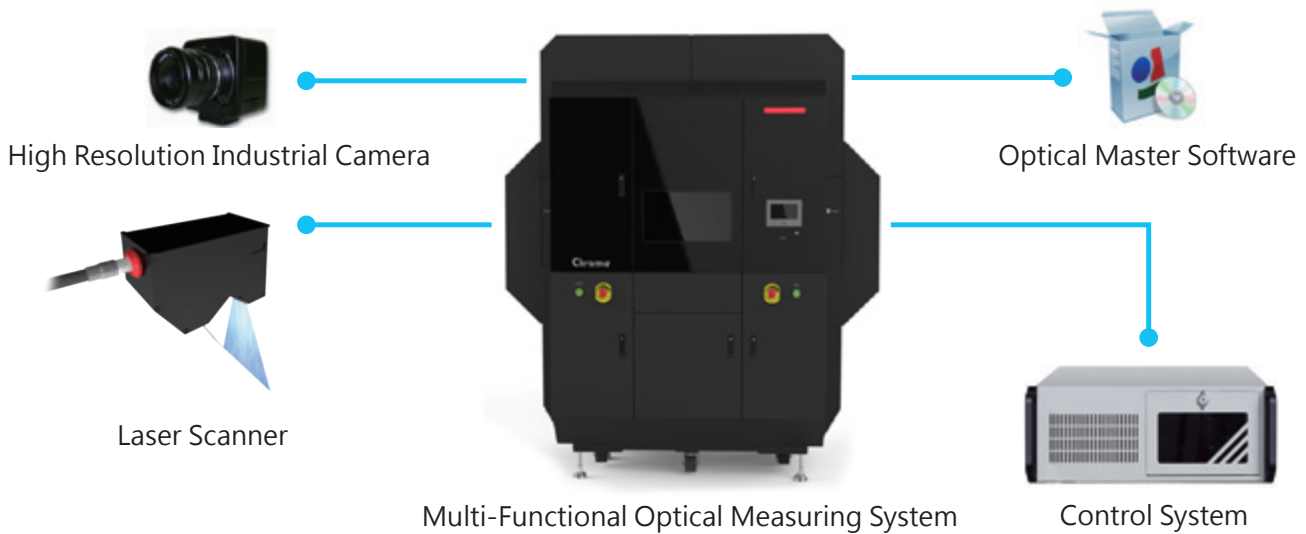
Dimensional Measurement Histogram  
(Real-time quality monitor)



Measurement concept similar to reverse engineering theory with full data analysis (Adaptable to various models)



## SYSTEM STRUCTURE



## SPECIFICATIONS

2D Measurement Probe	High Resolution Industrial Camera
3D Measurement Probe	Laser Scanner
Supported Software	Optical Master Software
Operating System	Windows 7® Traditional Chinese
UUT Measurement Range	Approx.160mm x 145mm x 16mm
Environmental Vibration Spec.	Office ISO-16000 (incl.) or above
Applicable Clean Room Class	Class 100,000
Dimension	H 2633mm x W 2284mm x D1620mm
Applicable Voltage	AC 220V ± 10% 60Hz 50A
Temperature	20~30°C (52°F to 62°F)
Humidity	Less than 75% relative humidity (noncondensing)

\*All specifications are subject to change without notice.

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