

# UNIMETRO A100

## Image Dimension Measurement System

Automated technology for fast, accurate and easy-to-achieve measurement results.

UNIMETRO®



A100 Image Dimension Measurement System is a new image measurement technology of UNIMETRO. It is different from the traditional 2D image measurement instrument in that it no longer needs the grating ruler displacement sensor as the accuracy standard, nor does it need to enlarge the product image through the lens with large focal length to ensure the measurement accuracy.

The structure of the fuselage is simple. It does not need the grating ruler of displacement sensor. It only needs the telecentric zoom lens with large viewing angle and large depth of field, high pixel CCD camera and powerful background software.

Through the double telecentric optical lens with large viewing angle and large depth of field, using high-speed digital processing function, combined with high-precision image analysis algorithm, it can complete the evaluation of dimensional tolerance at the same time with only one key. It is widely used in machinery, electronics, mold, injection molding, hardware, rubber, low-voltage electrical appliances, magnetic materials, precision stamping, connectors, terminals, mobile phones, household appliances, printed circuit boards, medical equipment, watches, knives and other fields.

◆ **Solve the problem of traditional measuring instruments:**

Traditional size measuring instruments, such as projector, tool microscope, image measuring instrument, contour measuring instrument, vernier caliper, etc., may face the problems of high operation difficulty, complex focusing process, time consuming of moving coordinate table, human error, long batch measurement time, and complicated data statistics management.

**Fast and efficient:**

- ✓ Products can be placed on the workbench at will, without additional fixture to fix and position.
- ✓ Rapid measurement, up to 512 parts can be measured at the same time.
- ✓ Make batch measurement more efficient, and batch measurement can be carried out quickly and accurately in CNC mode.

**Accurate and consistent:**

- ✓ With one click, anyone can easily obtain accurate and consistent measurement results.
- ✓ Software auto focus, no deviation caused by focus adjustment.
- ✓ Automatic identification of the measurement position, each time can obtain a unified and stable measurement results.

**Easy and simple:**

- ✓ Anyone can get started quickly, saving the time of manual training and improving work efficiency.
- ✓ Simple operation interface, the operator can quickly find the corresponding function and measure.
- ✓ Virtual lines and virtual points can be created to meet more measurement requirements.

## Fast and simple operation process:



1.Import template: support DXF format

2.Placement of workpiece: no need to position, arbitrary placement

3.One click measurement: press the button or hit the space bar

## Technical parameters:

Model Number		A100
Image sensor		2000W HD color digital camera
External display		24'
Light receiving lens		Single / double telecentric lens
Illumination	Drop shot system	Single zone ring directional lighting (white light)
	Transmission system	Telecentric transmission illumination (white light)
Broad Vision (mm)		130*100mm
Repeatability	Broad vision	± 3 (Coordinate table not moving)
Measurement Software		INS/F
Display resolution		0.1um
Z-direction electric coordinate table	Moving range	100mm
Dimension		240*415*770
Weight		50KG
Power Supply		100-240VAC, 50/60HZ

**Application:**

