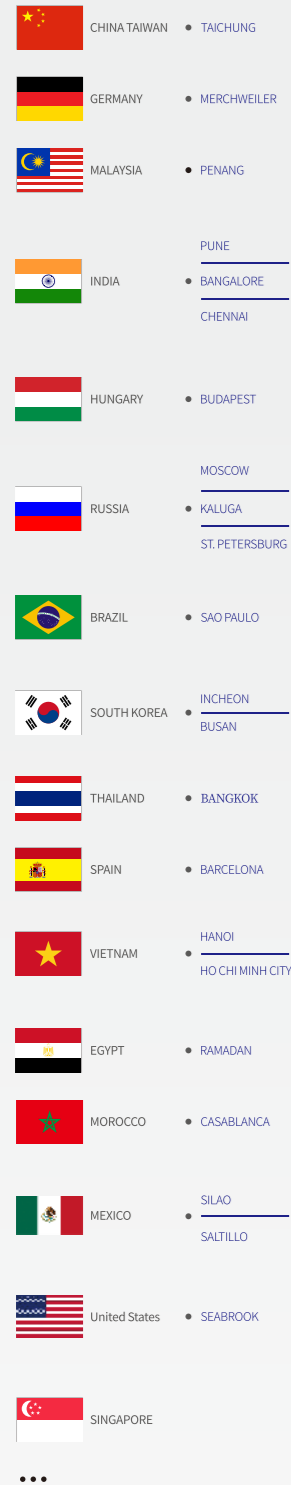


## Global partners



## Our service

UNIMETRO is devoting to offer the best metrology products and solution, also offer the best after sales service.

Free on-line support, free software upgrade and fast reaction of after sales service ensure the satisfaction of our customers and dealers.

## Global market

Dealers or distributors all over the world are welcome and we will offer full support in commercial and technical phase.

UNIMETRO is always providing products with the best price performance ratio and the best service.

## OEM and special measuring solution

UNIMETRO is available for OEM service for our distributors.

Thanks to the professional technical team of UNIMETRO, we are also capable for varies kinds of special measuring solution or devices development, please consult to our engineer if you have such kind of requirement.

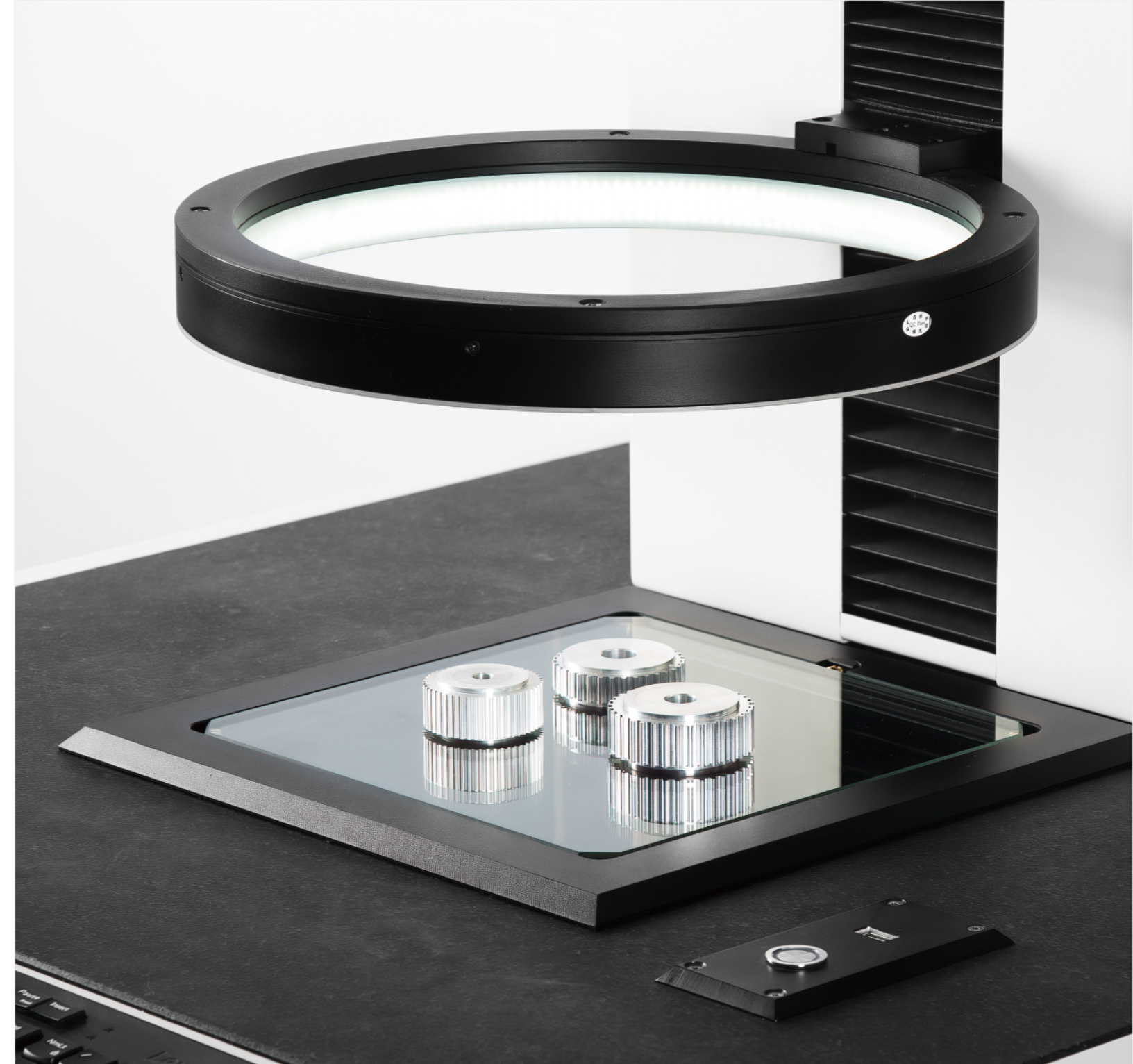


Image Dimension Measurement System  
Instant Measurement AVANT Series



Website

UNIMETRO(HONGKONG) INTERNATIONAL TRADING CO., LTD.  
DONGGUAN XIANGYU PRECISION MACHINERY CO., LTD.  
ZHUHAI XIANGYI TECHNOLOGY CO., LTD.

<https://www.unimetro.cn>

**UNIMETRO**<sup>®</sup>  
UNIVERSAL METROLOGY

# AVANT Series

## ONE-CLICK precision Image Dimension Measurement System

AVANT series ONE-CLICK precision Image Dimension Measurement System is a revolutionary image measurement technology launched by UNIMETRO. It is different from the traditional 2D image measuring instrument in that it no longer needs a linear transducer displacement sensor as the accuracy standard, and there is no need to enlarge the product through a high magnification lens to ensure the measurement accuracy or to move the workbench to obtain the coordinate data of different positions of the workpiece.

AVANT series uses a telecentric lens with small magnification, large field-of-view and high depth-of-field, coupled with a 20 megapixel high-definition digital camera, to enable the high-definition image of the entire part to be displayed at once. Combined with the sub-pixel software algorithms, users can quickly obtain accurate dimension measurement results. It is widely used in machinery, electronics, molds, injection molding, metals, rubber, low-voltage electrical appliances, magnetic materials, precision stamping, connectors, terminals, mobile phones, household appliances, printed circuit boards, medical equipment, watches, and milling tools, etc.

## Advantages

- Parts can be placed arbitrarily without additional fixturing or positioning.
- Rapid measurement, up to 512 dimension can be measured simultaneously.
- Batch measurement, up to 99 workpieces can be placed at one time.
- With just one click, user can get accurate measurement results and eliminate human errors.
- High depth-of-field lens, even for products with segment difference, user can obtain accurate focusing at one time, improving efficiency.
- Automatic identification of workpiece features matched, to ensure measurement repeatability.
- Easy programming and setting, even operators without experience in measuring operation can get started quickly.
- Sub-pixel image processing technology offers higher measurement accuracy.
- Rapid measurement report output and data statistics.
- LED indicators included, users easily judge the measuring result OK/NG.
- The telecentric parallel contour light is used to minimize the deformation of the image and adapt to more diversified workpiece measurement applications.
- Optional dual-magnification lens, offers switchable magnification and FOV, taking account of the overall and detailed measurements simultaneously.
- Fast access to automation line.

### AVANT100 Horizontal

Horizontal fast image dimension measurement machine is specially designed for small shaft parts.

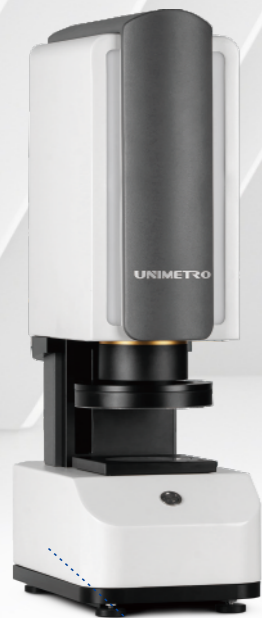
### Including all basic functions of the image dimension measurement machine

High-precision rotary stage provides visible rotation angle, allows users to measure workpiece dimension from different angles to obtain more accurate measurement results.



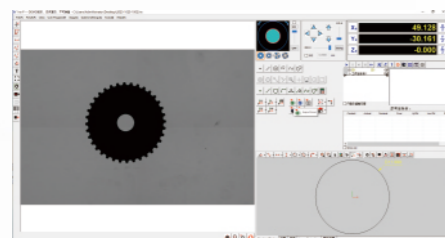
### AVANT190

Larger lens, larger field of view, which can measure larger workpieces, to improve measurement efficiency and productivity.



### AVANT100

For regular small parts fast measurement



Measuring software interface

## Specification

Items	AVANT 100	AVANT 190	AVANT 100 Horizontal	AVANT 50 Horizontal
Measuring Range(mm) (X/Y/Z)	85/54/60	175/116/100	85/54/60	44/29/50
Dimension(mm) (X/Y/Z)	250/440/835	650/1010/1750	840/260/440	840/260/440
Weight(KG)	70	560	75	75
Control mode	Z axis motorized		Motorized rotary table, manual focus	
Lens	Single / Dual (Optional) magnification telecentric large-FOV lens	Single magnification telecentric large-FOV lens	Single / Dual (Optional) magnification telecentric large-FOV lens	Single magnification telecentric large-FOV lens
FOV(mm)	84x54 Low Mag./20x14 High Mag.	175x116	84x54 Low Mag./20x14 High Mag.	44x29
Camera	HIKVISION 20M pixel digital camera			
Measuring Accuracy	≤3μm			
Repeatability	≤3μm			
Surface light	LED ring light/Co-axial light/Movable 4 section ring light	LED ring light	—	—
Contour light	Telecentric LED light / Flat LED light	Telecentric LED light / Flat LED light	Telecentric LED light	Telecentric LED light
Software	FlashPro/Ins-F			