

# MEASURING INSTRUMENTS

Module: Product barcode scanning/dimension measurement/MES system upload/sample classification;  
Function: Dimension measurement of length/width/diameter/angle/step height/height/shape tolerance/profiling/roughness, etc.;  
Application: 3C/new energy/semiconductor/5G, etc.;  
Suitable for: Glass/hardware components/plastic parts/electronic components, etc.



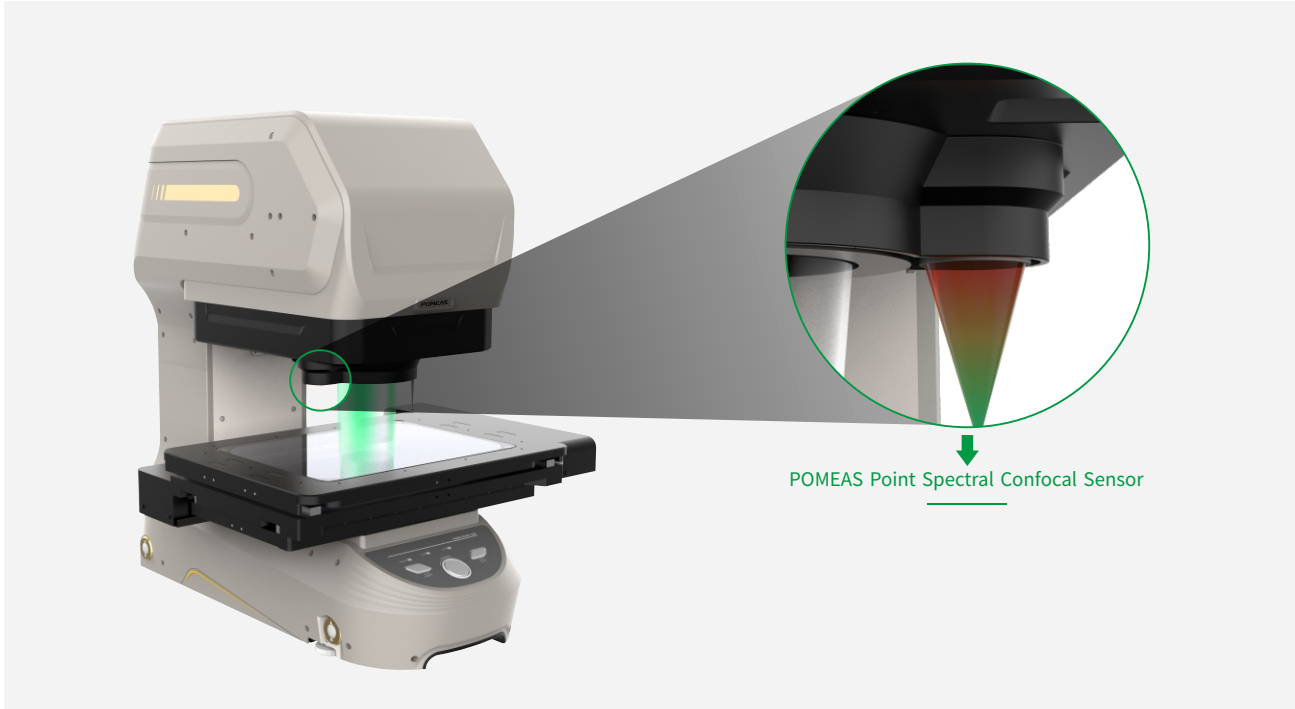
## SYSTEM STRUCTURE

|                                                                              |                                                                            |                                                                                                   |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <p>IMAGE3</p> <p>No XY platform</p>                                          | <p>IMAGE3 PLUS</p> <p>200*200 Mobile Platform</p>                          | <p>IMAGE3 PRO</p> <p>300*200 Mobile Platform</p>                                                  |
| <p>IMAGE3 PRO-H</p> <p>300×200 Mobile Platform with Spectral Measurement</p> | <p>IMAGE3 MAX</p> <p>300×200 Mobile Platform with Spectral Measurement</p> | <p>IMAGE3 MAX2</p> <p>300×200 Mobile Platform with Spectral Measurement and Probe Measurement</p> |
| <p>C1/C2</p>                                                                 |                                                                            |                                                                                                   |

Technology for Achieving High-Precision Measurement

# XYZ Coordinate Measuring

## Point Spectral Confocal Sensor



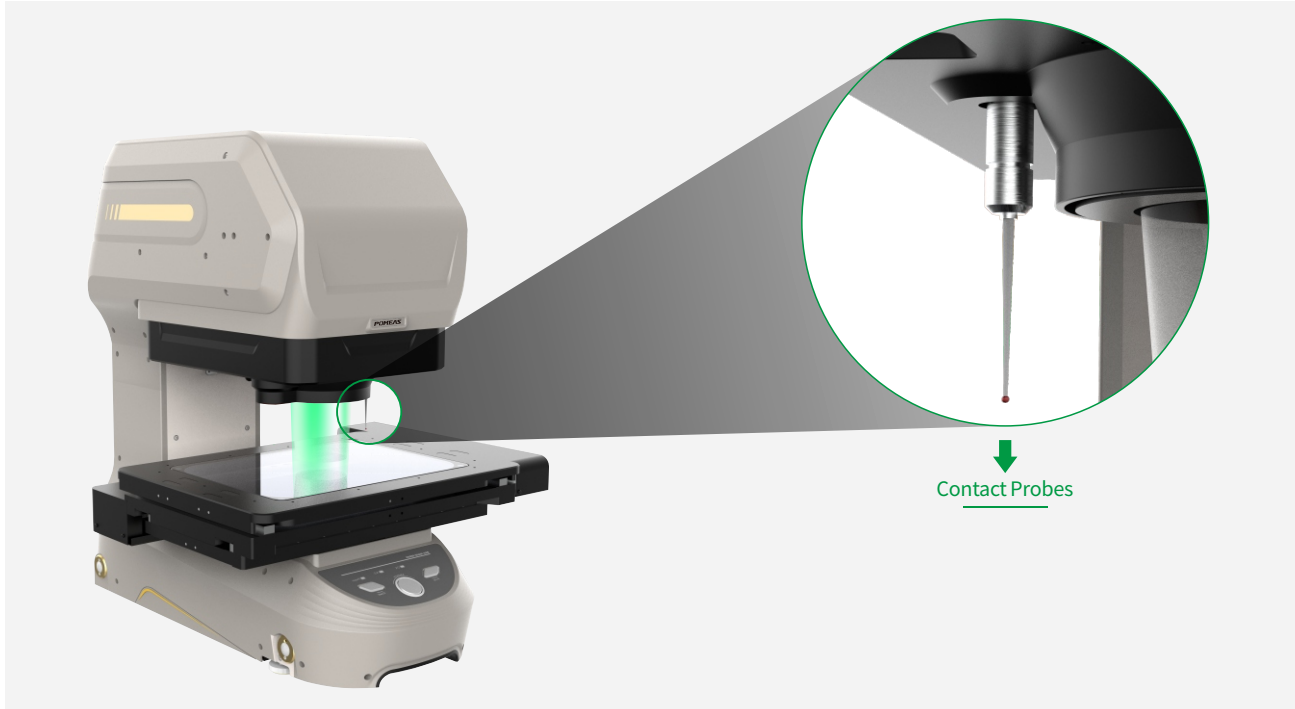
■ Point-Spectrum Confocal Sensors Solve Height Measurement Challenges

|                                |                                                                                                                                                                                                                                                                |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quick                          | Traditional autofocus systems require extended scanning time during focusing, whereas point-spectral confocal sensors can complete measurements instantaneously.                                                                                               |
| High precision                 | The optical unit incorporates various components such as light sources, while the measuring head retains only the lens internally. This design enables high-precision measurement unaffected by factors like heat generation and electromagnetic interference. |
| Suitable for various materials | The optical unit incorporates various components such as light sources, while the measuring head retains only the lens internally. This design enables high-precision measurement unaffected by factors like heat generation and electromagnetic interference. |

Technologies For Realizing High-precision Measurements

# XYZ Coordinate Measuring

## Contact Probes

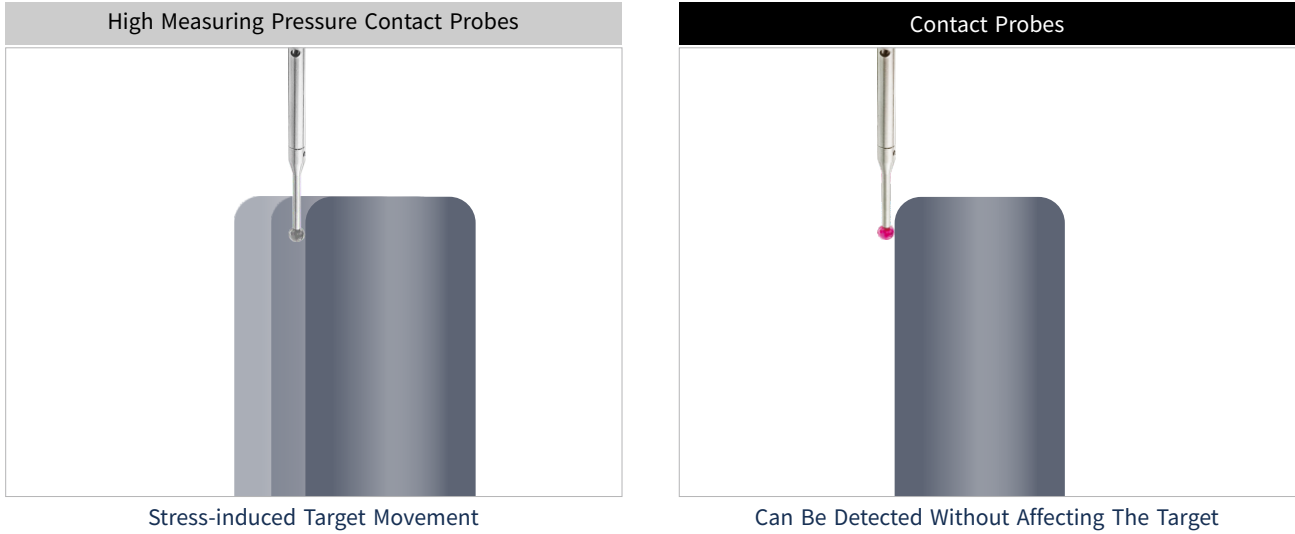


■ Correctly Measure Tops, Sides, And Slopes

For parts with high measurement accuracy, you can choose an image measuring machine with an addable probe that is used to acquire elements (points or surfaces) and then calculate the height in the software.

■ Measurement Of Small, Lightweight Targets Without Fixtures

The measuring pressure of many contact measuring instruments is too strong, resulting in small, lightweight targets that may be off-center, thus requiring the use of fixtures to hold the target in place.By using a contact-type ultra-small measuring pressure, the time and cost required to secure the target with a fixture is therefore saved, and measurements can be performed accurately. In addition, there is no risk of deformation of soft targets.



# Three Measurement Methods

Effortlessly Achieve High-Precision Measurement



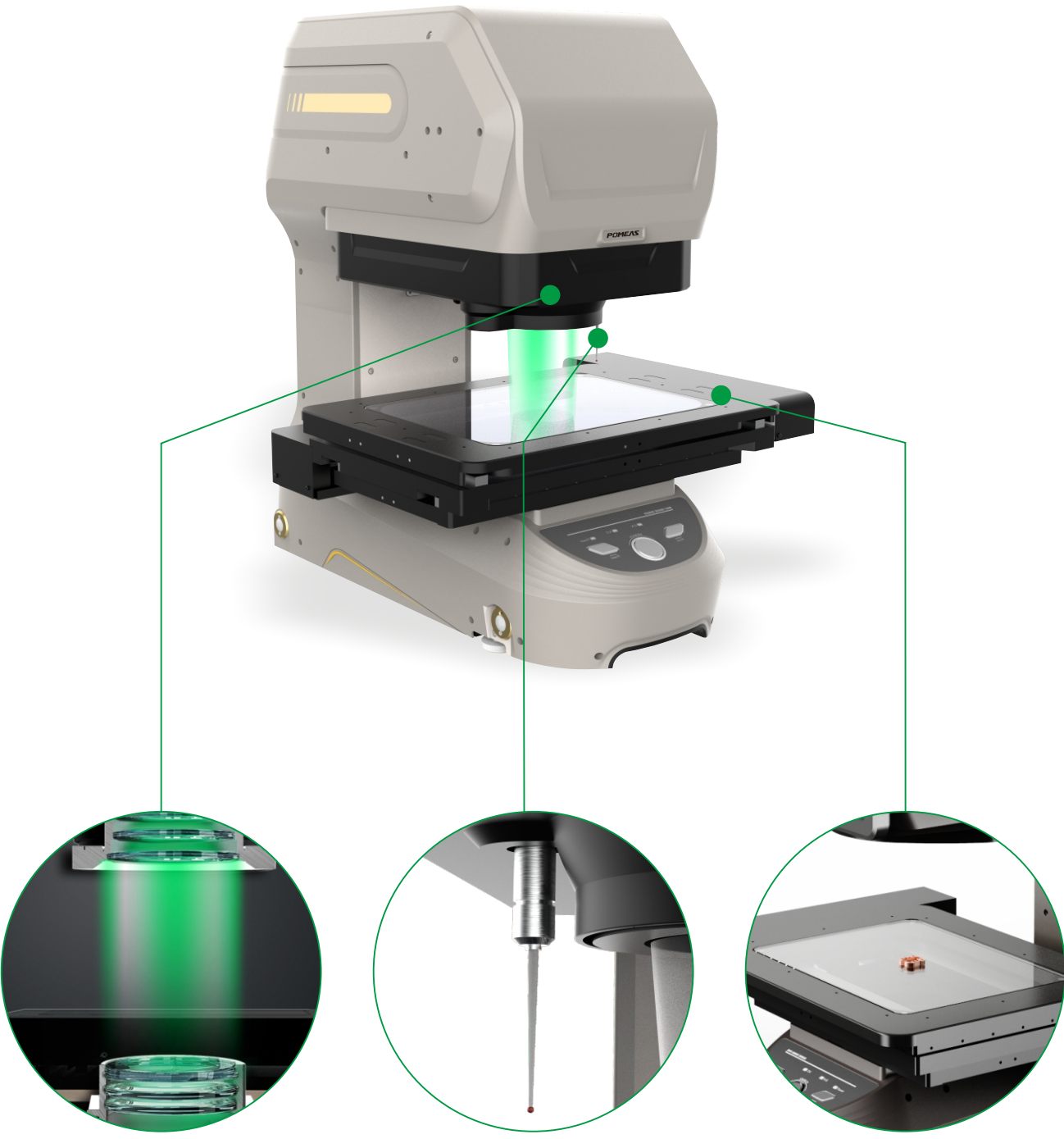
Contact Probe  
Coordinate Measuring  
Machine for Solid Objects

8055-point spectral confocal  
sensor for instantaneous height  
measurement

Ultra-high-resolution camera  
for high-precision image  
measurement

Technology for Achieving High-Precision Measurement

# IMAGE 3 Technology for Achieving High-Precision Measurement



Optical system for accurately  
capturing the edges to  
be measured

XYZ Coordinate  
Measuring Machine

High-Precision  
Large-Scale Coordinate Stage

Network Functions And Software

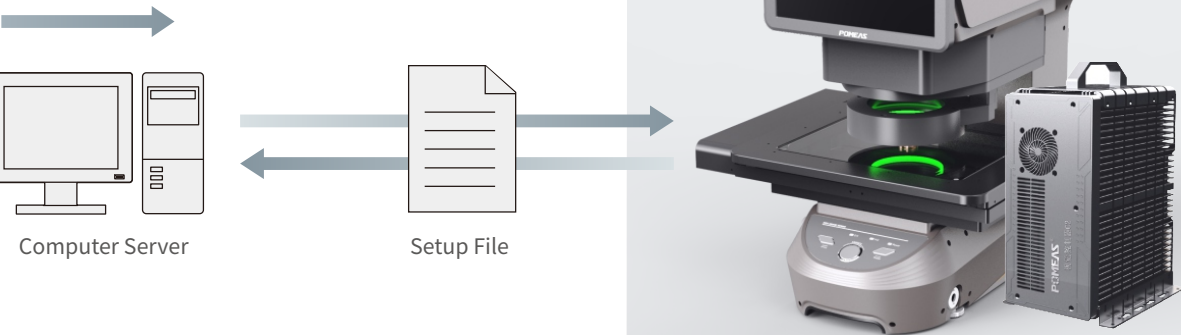
Measurement Setting Software

You can add or change the measurement position of the data produced by image dimension measurement system:using a computer at your side. Settings can be changed even when you are not in the vicinity of the equipment, and setting instructions can be corrected or measurement results can be printed from a distance when operating at home;or remotely.



Transferring Data Over A LAN Connection

A LAN connection makes it easy to transfer setup files created on a computer or a image dimension measurement system to a remote image dimension measurement system.



Data Transmission Software



The results measured by the image dimension measurement system can be automatically transferred to the specified cell of the table calculation software on the specified computer. If the inspection table has a fixed format, measurement data can also be imported in its format.

Computer Software Usage Environment

|                       |                                         |
|-----------------------|-----------------------------------------|
| Supported OS          | Windows 10 Home/Pro/Enterprise (64-bit) |
| Hard Drive Free Space | 30 Gb or more                           |

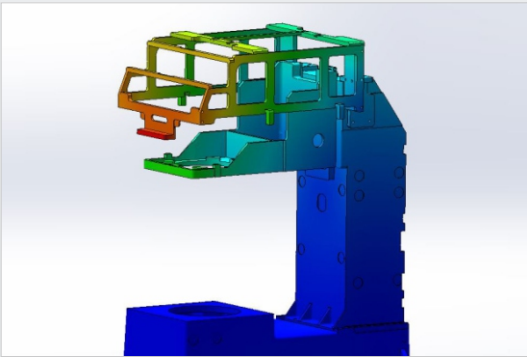
- Windows is a registered trademark or trademark of Microsoft Corporation in the United States and other countries.
- The official name of Windows is Windows® operating system.

Performance And Reliability



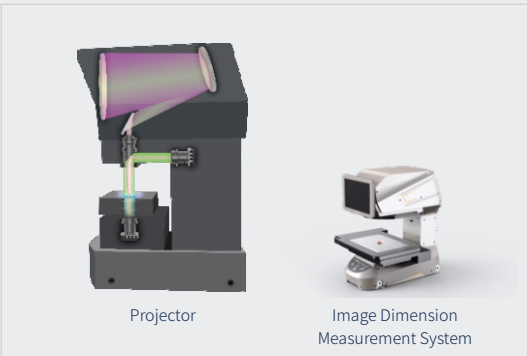
Calibration Certificates & Certificates Of Approval

Performs tests and calibrations and factory calibration certificates. After purchasing this equipment, we are able to perform the same calibration and adjustment operations and deliver the calibration and certificates.



Highly Rigid Body

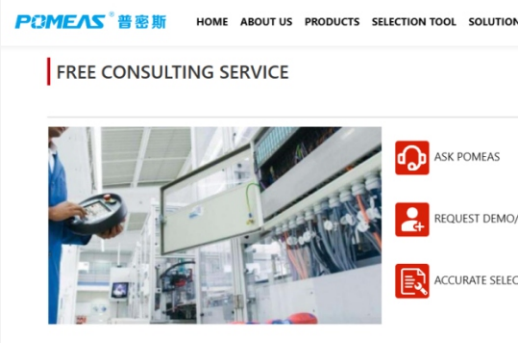
Adoption of a highly rigid body makes it is easy to change the installation place. The design is optimised by topological analysis and strength analysis, and strength analysis, making it possible to increase productivity.



Space-Saving Design For Desktop Architecture

The integrated design of the monitor and the main unit have dramatically reduced the space required for installation, making it possible to install the measuring instrument at the place where you wish to measure. On the other hand, the monitor size has become larger, and the screen is easier to observe.

Reliable Supporting System

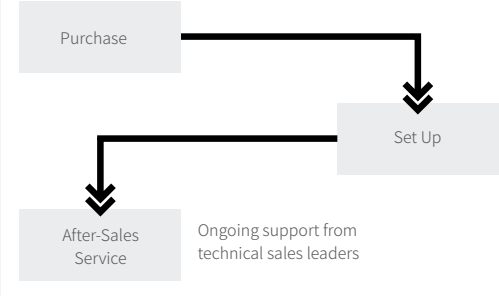


### Free Upgrade To The New Version

Upgrades to new versions of the software can be obtained by contacting us.

Well-Established Overseas Service And Support System

Distributor Sales



After-Sales Service

Ongoing support from technical sales leaders

### Overseas Dealer System

There is a well-established dealer system to provide after-sales service, covering technical support, warranty support, repair and maintenance services, training and education. Distributors act as a bridge between the customer and the manufacturer, maintaining a high standard of after-sales service, enhancing customer satisfaction and establishing brand loyalty.

Multi-Language Support

|                    |                     |         |
|--------------------|---------------------|---------|
| Simplified Chinese | Traditional Chinese | English |
| German             | French              | Russian |
| Spanish            | Japanese            | Korean  |

### Multi-Language Support

Multi-language software interfaces, marketing materials and instructions for use to support localised services to meet global market demands.

DIMENSIONS

IMAGE3

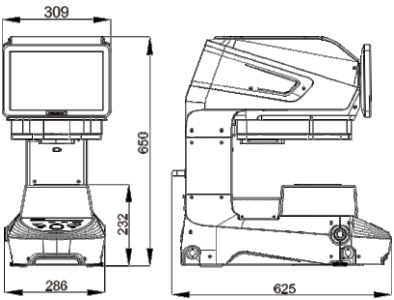


IMAGE3 PLUS

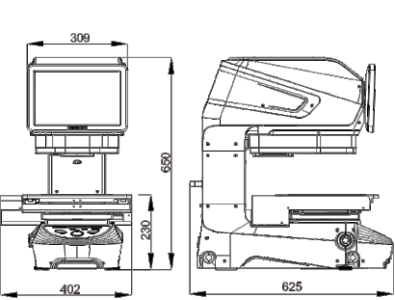


IMAGE3 PRO

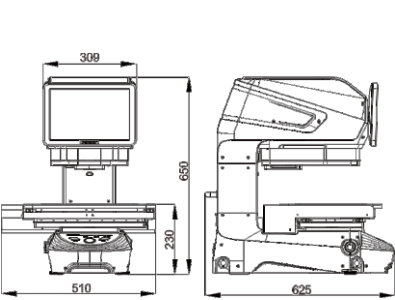


IMAGE3 PRO-H

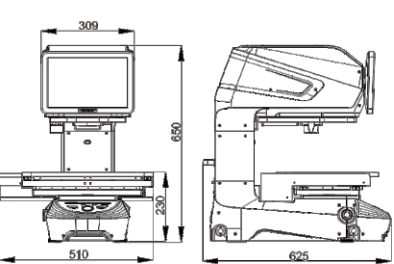


IMAGE3 MAX

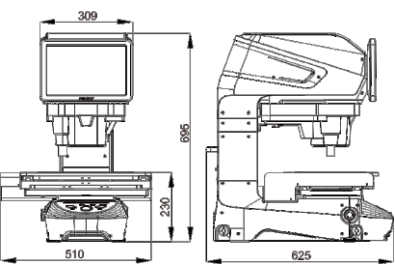
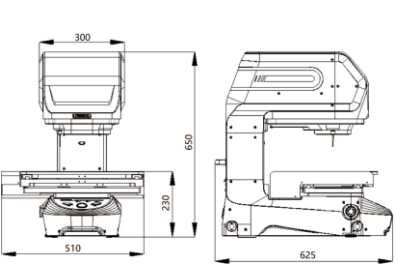


IMAGE3 MAX2



PRODUCT CASES

Screws, Bolts

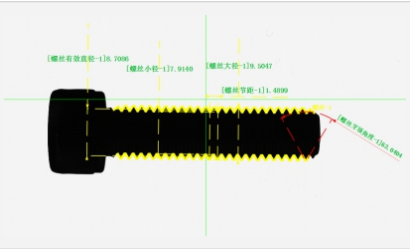


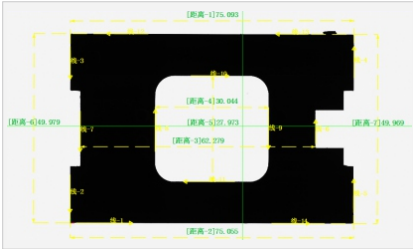
Machined Parts

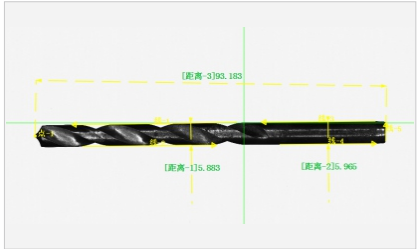


Tool



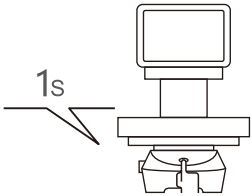






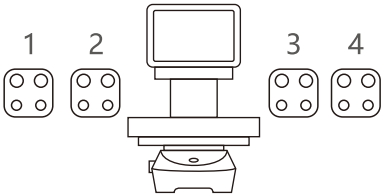
Suitable For Various Inspection Processes

Reduced Measurement Time



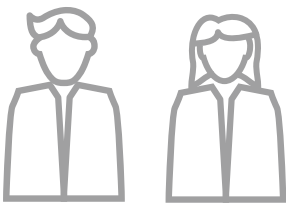
Increase productivity and reduce costs by reducing inspection time.

Increase In The Number Of Checks



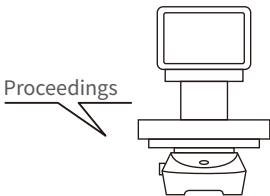
May increase the number of examined, thereby reducing the risk of adverse occurrences.

Can Be Tested By Non-Testing Personnel



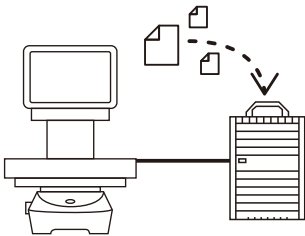
Increase equipment availability by reducing the burden on the quality department.

Standarise Of Inspection



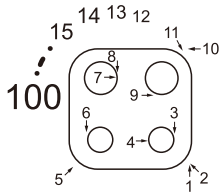
Inspection criteria can be standardised to ensure consistent quality.

Reduces The Time Required To Record Measurement Data



Cut data management costs by reducing the time required to record inspection data. costs.

Increase In The Number Of Measuring Parts



Unchecked areas can be measured without increasing the number of measuring man-hours,thus effectively improving quality. and effectively improve quality.

| Product Parameters           |                                 |                                            |                |                                                                                  |                          |                          |                            |                                                            |                                                 |                  |
|------------------------------|---------------------------------|--------------------------------------------|----------------|----------------------------------------------------------------------------------|--------------------------|--------------------------|----------------------------|------------------------------------------------------------|-------------------------------------------------|------------------|
| Equipment Model              |                                 |                                            |                | IMAGE 3                                                                          | IMAGE 3 PLUS             | IMAGE 3 PRO              | IMAGE 3 PRO-H              | IMAGE 3 MAX                                                | IMAGE 3 MAX 2                                   |                  |
| Imaging Measurement          | Measuring Range (mm)            | High Precision Measurement Mode(x*y*z)     |                | 18*18                                                                            | 118*118*75               | 218*118*75               | 218*118*75                 | 205*104*75                                                 | 206*106*75                                      |                  |
|                              |                                 | Wide Field Of View Measurement Mode(x*y*z) |                | φ100                                                                             | 200*200*75               | 300*200*75               | 300*200*75                 | 223*118*75                                                 | 225*125*75                                      |                  |
|                              | Lens field of view (mm)         | High-precision Measurement Mode            |                | 18×18                                                                            |                          |                          |                            |                                                            | 6.4×4.8                                         | 6×6              |
|                              |                                 | Wide Field Of View Measurement Mode        |                | Φ100                                                                             |                          |                          |                            |                                                            | 18.8×14.1                                       | 25×25            |
|                              | Repeat Accuracy (μm)            | High-precision Measurement Mode            |                | ±0.5                                                                             |                          |                          |                            |                                                            | ±0.25                                           | ±0.25            |
|                              |                                 | Wide Field Of View Measurement Mode        |                | ±1                                                                               |                          |                          |                            |                                                            | ±0.5                                            | ±0.5             |
|                              | Measurement accuracy (μm)       | High-precision Measurement Mode            | Connectionless | ±2 <sup>*1</sup>                                                                 |                          |                          |                            |                                                            | ±1                                              | ±1 <sup>*2</sup> |
|                              |                                 |                                            | Connected      | /                                                                                | ±(2+0.02L) <sup>*3</sup> | ±(2+0.02L) <sup>*4</sup> |                            | ±(1.5+0.02L) <sup>*5</sup>                                 |                                                 |                  |
|                              |                                 | Wide Field Of View Measurement Mode        | Connectionless | ±4 <sup>*6</sup>                                                                 |                          |                          |                            |                                                            | ±1.5 <sup>*7</sup>                              |                  |
| Connected                    |                                 |                                            | /              | ±(4+0.02L) <sup>*8</sup>                                                         | ±(4+0.02L) <sup>*9</sup> |                          | ±(2+0.02L) <sup>*10</sup>  |                                                            |                                                 |                  |
| Height measurement           | Repeatability (μm)              |                                            |                | /                                                                                |                          |                          | ±2                         |                                                            |                                                 |                  |
|                              | Measurement Accuracy (μm)       |                                            |                |                                                                                  |                          |                          | ±(3.5+L/50) <sup>*11</sup> |                                                            |                                                 |                  |
|                              | Working Distance(mm)            |                                            |                |                                                                                  |                          |                          | 55                         |                                                            |                                                 |                  |
|                              | Range (mm)                      |                                            |                |                                                                                  |                          |                          | ±3                         |                                                            |                                                 |                  |
| Optical System               | At The Opportune Moment         |                                            |                | 1" 20 Megapixel B/W CMOS Camera*2                                                |                          |                          |                            | 1"12-megapixel black-and-white CMOS camera                 |                                                 |                  |
|                              | Camera Shot                     |                                            |                | Double-magnification bilateral telecentric lens                                  |                          |                          |                            | High-precision dual-magnification image acquisition system | Double-magnification bilateral telecentric lens |                  |
|                              | Matte                           |                                            |                | Liftable Quad White Ring Light+green Gap Light Source                            |                          |                          |                            |                                                            |                                                 |                  |
|                              | Silhouette Light                |                                            |                | Green Parallel Bottom Light Source                                               |                          |                          |                            |                                                            |                                                 |                  |
|                              | Coaxial Optical                 |                                            |                | Built-in Coaxial Light Source (optional)                                         |                          |                          |                            | Built-in Coaxial Light Source                              |                                                 |                  |
| Height sensors               | Spectral Confocal Probes        |                                            |                |                                                                                  |                          | 8055                     |                            | 8055(optional)                                             |                                                 |                  |
|                              | Spectral Measurement Range (mm) |                                            |                |                                                                                  |                          | 145×95×75                | 122×100×75                 | 135×100×75                                                 |                                                 |                  |
|                              | Mirror Measurement Angle        |                                            |                |                                                                                  |                          | ±13.6°                   |                            |                                                            |                                                 |                  |
|                              | Spot Size (μm)                  |                                            |                |                                                                                  |                          | 17                       |                            |                                                            |                                                 |                  |
|                              | Linear Accuracy                 |                                            |                |                                                                                  |                          | 0.02%F.S.                |                            |                                                            |                                                 |                  |
| Table Load(kg)               |                                 |                                            |                | 5                                                                                |                          |                          |                            |                                                            |                                                 |                  |
| Measurement System           |                                 |                                            |                | AI-Image (self-developed)                                                        |                          |                          |                            |                                                            |                                                 |                  |
| Supply Power Supply          |                                 |                                            |                | 220V+20%, 50Hz                                                                   |                          |                          |                            |                                                            |                                                 |                  |
| Working Environment          |                                 |                                            |                | Temperature: 20±3°C; Humidity: 30-80% (no condensation); Vibration: <0.002g 15Hz |                          |                          |                            |                                                            |                                                 |                  |
| Minimum Display Unit (μm)    |                                 |                                            |                | 0.1                                                                              |                          |                          |                            |                                                            |                                                 |                  |
| Instrument Weight (kg)       |                                 |                                            |                | 33                                                                               | 45                       | 50                       | 45                         | 33                                                         | 45                                              |                  |
| Overall Dimension(l*w*h)(mm) |                                 |                                            |                | 625*309*650                                                                      | 625*402*650              | 625*510*650              | 625*510*650                | 625*510*695                                                | 625*510*650                                     |                  |

Note

① in the focus position, the use of ambient temperature 20 ± 1°C;

② Coordinate table load 2Kg or less, L is the amount of movement of the coordinate table;

③ The accuracy verification without connection mode uses optical calibration sheet, and the accuracy verification with connection mode uses line pattern ruler.

\*1 Within the range of 20mm×14mm;

\*2 Within the range of 5mm×5mm;

\*3 Within the range of 113mm×105mm;

\*4 Within the range of 200mm×105mm;

\*5 Within the range of 185mm×95mm;

\*6 Within the range of φ80mm;

\*7 Within the range of 20mm × 20mm;

\*8 Within the range of 180mm × 180mm;

\*9 Within the range of 270mm × 180mm;

\*10 Within the range of 200mm × 200mm;

\*11 Zeroing of spectral focus position, L is Z-axis travel stroke, L≤75mm;