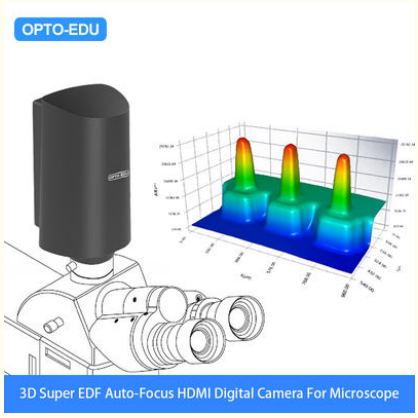
# HDMI Digital Camera Microscope Accessories Sony 1/2" Color CMOS

Our Product Introduction

## Basic Information

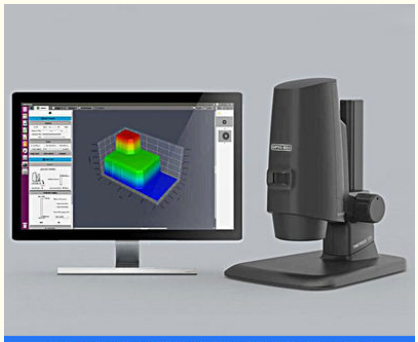
- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE, Rohs
- Model Number: A59.3820
- Minimum Order Quantity: 1 pc
- Price: FOB $1~1000, Depend on Order Quantity
- Packaging Details: Carton Packing, For Export Transportation
- Delivery Time: 5~20 Days
- Payment Terms: T/T, West Union, Paypal
- Supply Ability: 5000 pcs/ Month



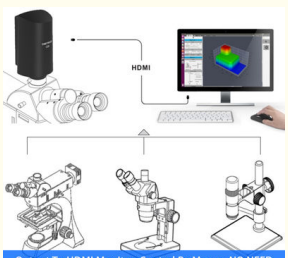
3D Super EDF Auto-Focus HDMI Digital Camera For Microscope

## Product Specification

- Sensor: Sony 1/2"color CMOS
- Resolution: 1080P(1920×1080)
- Pixel Size: 3.75μm×3.75μm
- Shutter Mode: Rolling
- Scanning Method: Progressive Scanning
- Frame Rate: 60fps(Normal),30fps(WDR)
- Gain: Automatic / Manual
- Exposure Time: Automatic: 0.1ms-16.6ms, Manual: 0.0001s-1s
- White Balance: Automatic/manual/area
- Highlight: **opto edu microscope accessories**, **hdmi microscope accessories**

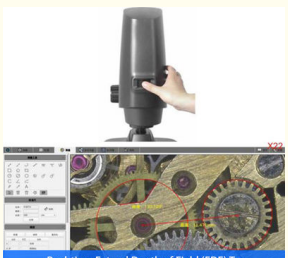

Smart Camera Directly Acquires And Measures Microscopic 3D Image! Upgrade The Observation And Analysis Capabilities Of Your Microscope!

## More Images



Output To HDMI Monitor, Control By Mouse, NO NEED Computer, Directly Obtain & Measure 3D Images.


Intelligent Built-in Computer With Software & Friendly User Interface


Real-time Extend Depth of Field (EDF) To Avoid Blurry, False Image Phenomenon


Combined 4 Professional Equipment All-inOne: High-speed Dynamic Color Camera, Microscopic Image Analysis Software Precision Z-axis Motorized Stage, High-performance PC Work Station

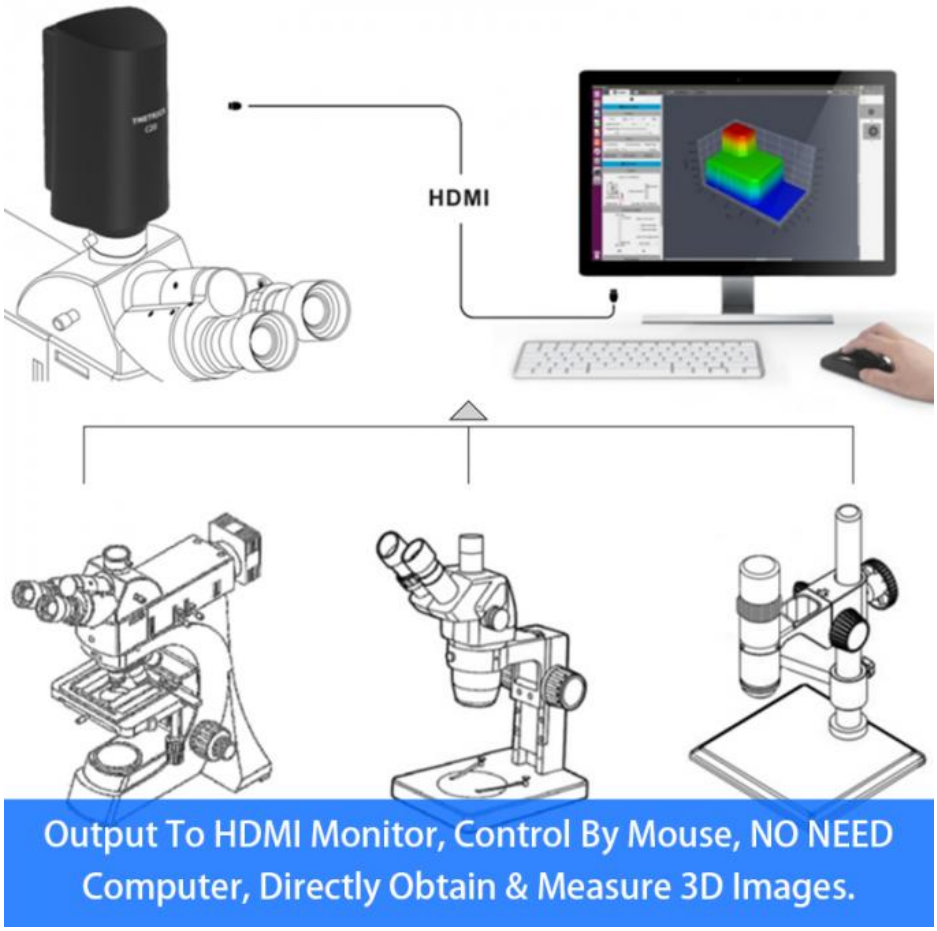
## Product Description

OPTO-EDU A59.3820 3D Super EDF Auto-Focus Measuring HDMI Digital Camera Sony 1/2"color CMOS

### Easy to Use
Output to HDMI monitor, control by mouse, NO NEED computer, directly obtain & measure 3D images.

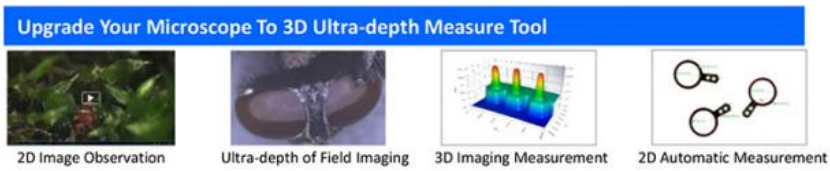
### Wide Usage
Standard C Mount, can be used with different microscopes such as metallurgical, stereo, mono tube, etc

### Auto-Focus Measurement
Under the 10X objective lens, the accuracy of 2D and 3D measurement can reach 2 micrometers.




A58.3520 microscopic 3D imaging camera has the characteristics of high integration and flexible application, no other modification is required, it can be directly used with a microscope. The operation is simple, all functions can be completed by the mouse. Performance guarantee for integrated linkage: The built-in intelligent heterogeneous computer host can directly perform a large number of calculations instead of a computer, with fast operation speed and stable operation; Real-time ultra-depth of field and 3D modeling algorithm can help the microscopy system to realize the three-dimensional observation and measurement analysis of the whole body; automatic edge recognition algorithmIt can also further improve the efficiency of microscopic observation and batch work.


Intellegent Built-in Computer With Software & Friendly User Interface

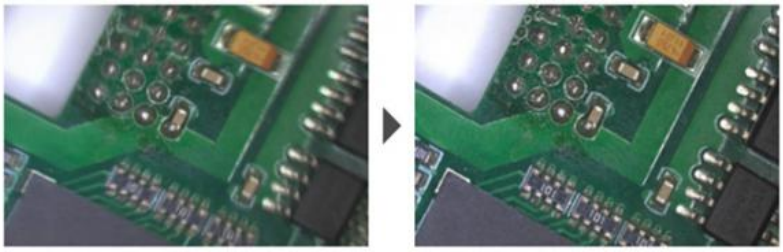




## Ultra-depth observation, observe all feature points on the same plane

Open the software “Shooting-Advanced Imaging -EDF & 3D" function module, click to confirm the upper and lower focal position to be observed in the image, click "EDF", A59.3820 can automatically Expand Depth of Field, obtain a full-frame in-focus screen, and observe all the feature points on the same picture

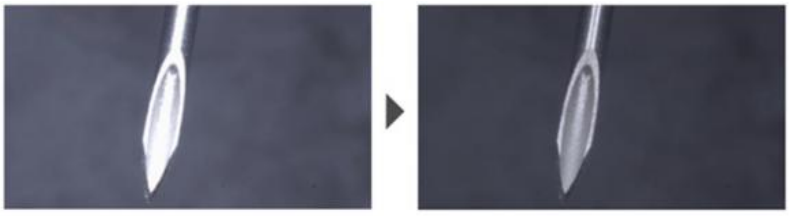

## Real-time Extend Depth of Field (EDF) To Avoid Blurry, False Image Phenomenon

Based on the three-dimensional system carried on different platformsWhen the depth of field is expanded, it is easy to produce a degree deviationThe amount, rotation, and focus are unevenelephant. A59.3820 intelligent computing linkage performance canTo help solve the above problems, with a microscopeLens, you can also get a clear and correct full frameFocus screen.



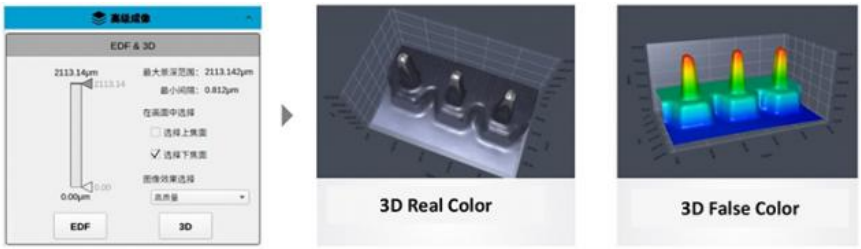
## Real-time Wide Dynamic Range (WDR) Effectively Eliminating Strong Reflection Light

The strong reflection light from the surface is easy to cause details loss of information and affects judgment. A59.3820 WDR mode calculates multiple differentLuminance map data, able to create exposurePerfect images with clear light and dark details



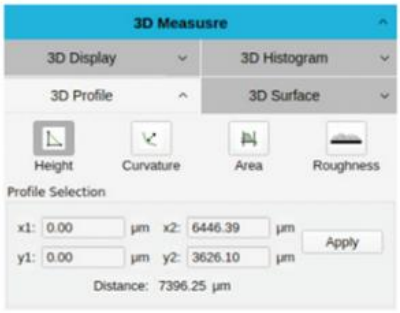
## Sample Cases Upgrade Observation And Analysis Capabilities of Your Microscope

Open the software “Shooting-Advanced Imaging-EDF & 3D" function module, click to confirm the upper and lower focal position to be observed in the image, click "3D", A59.3820 can automatically complete the creation of 3D models, supports two display modes, real or false color, and can be rotated 360 degrees for observation.

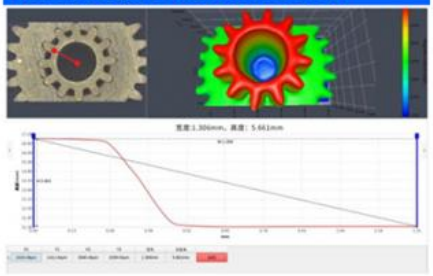


## Rich 3D Measurement Functions

**A59.3820** Provide a wealth of 3D analysis tools, which can analyze 3D modelsMeasure at any position, and can record and save in real time data. Under a 10x objective lens, the Z-axis measurement accuracy can reach 2 micrometers, the repeatition accuracy can reach 1 micron, with higher magnification. The objective lens can also obtain more precise size information, satisfyingExtremely demanding microscopic 3D measurement.

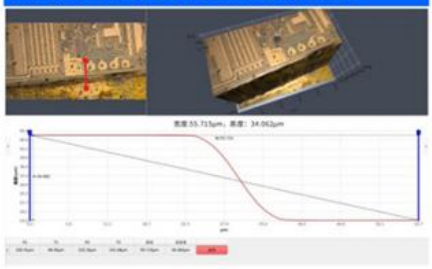



## Measure Height of Inner Hole of The Part



Stereo Microscope
Watch Gear
Height 5.661mm

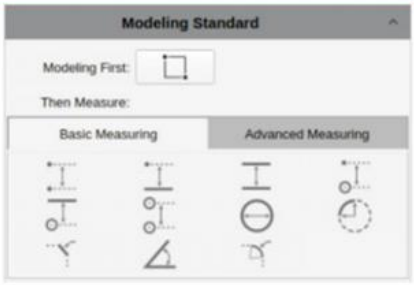
## Analyze Structure of Precision Components



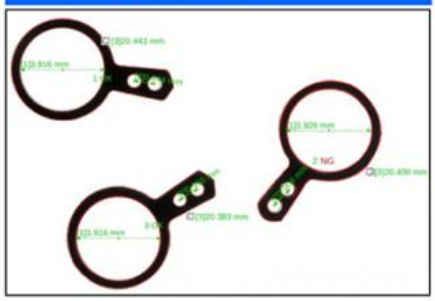
Metallurgical Microscope
Chip Inner Structure
Height 34.062um

## Automatic 2D Measurement Eliminate Human Errors And Proceed Batch Operations

**A59.3820** also has 2D intelligent image recognition and batch measurement functions.No need for precise positioning by hand, you can quickly complete standard product modeling work, effectively eliminate human operation errors, and help complete various types ofBatch measurement job. Under 10x objective lens, the auto measurement accuracy can be up to 2 micrometers, repeat accuracy 2 micrometers, to ensure batch measurement resultsAccuracy.

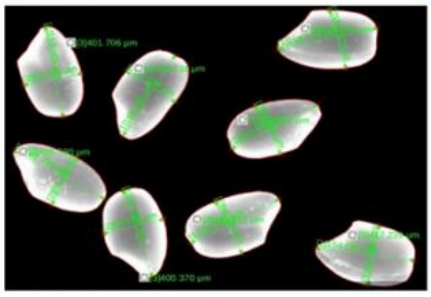



## Automatic Judge Qualified / Non-Qualified Parts



For standard parts, **A59.3820** can be customized according to the set standard deviation range. Dynamically display OK/NG results of samples to improve quality inspection and analysisefficiency.

## Output All Measurement Data At One Time

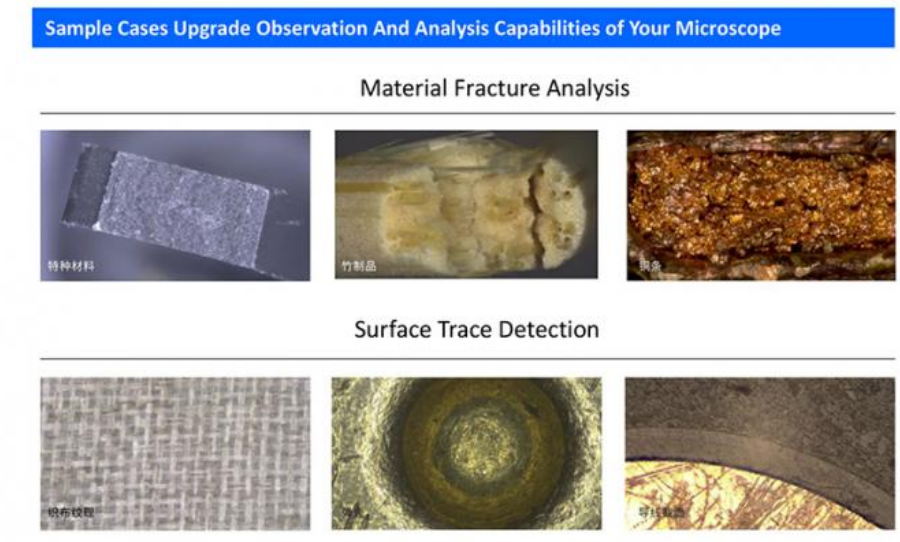


For non-standard parts, **A59.3820** can set similarity tolerance, output the measurement data of all samples at once to improve batch measurementefficiency.

## Test Report Creation Function

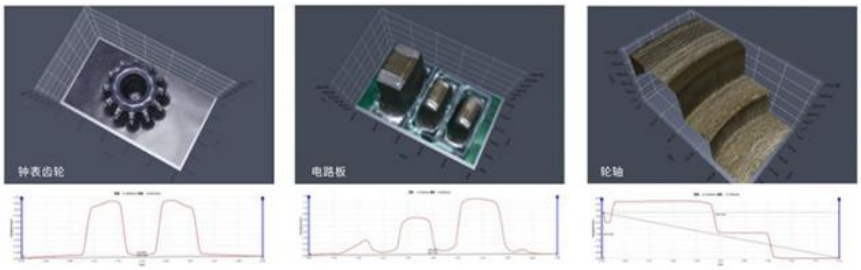
**A59.3820** Not only can save images and video data, but also judge Qualified / Non-Qualified parts automatically and create a graphical test report to work as the dimension in the flow, All 3D data can be exported. After the operation is over, the work is complete. simple and easy!

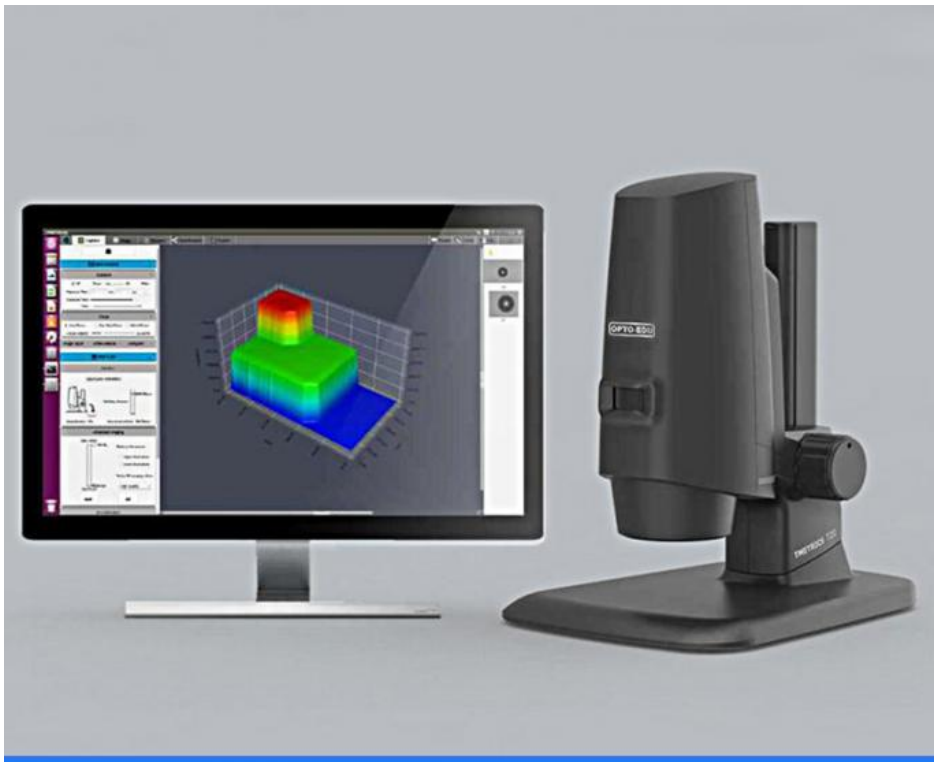
| Model | A59.3820 3D Super EDF Auto-Focus HDMI Digital Camera | |
|---|---|---|
| Camera Features | Sensor | Sony 1/2"color CMOS |
| | Resolution | 1080P(1920×1080) |
| | Pixel size | 3.75μm×3.75μm |
| | Shutter mode | Rolling |
| | Scanning method | Progressive scanning |
| | Frame rate | 60fps(Normal),30fps(WDR) |
| | Gain | Automatic / Manual |
| | Exposure time | Automatic: 0.1ms-16.6ms, manual: 0.0001s-1s |
| | White balance | Automatic/manual/area |
| | Image storage | TIFF/JPEG |
| | Video format | AVI/MP4(1080P) |
| Advanced Features (Embedded) | 3D noise reduction | Support |
| | WDR | Support |
| | Real-time EDF | Support |
| | Edge enhancement | Support |
| | Gamma correction (contrast) | Support |
| | Color enhancement | Support |
| | Flat field correction | Support |
| | Effect mode | Normal/Negative/Relief/Grayscale |
| 3D display and measurement | Online calibration | Support |
| | 3D display | Pseudo-color/real scene display, grid lines, 360°rotation |
| | 3D histogram | Support |
| | 3D profile measurement | Height difference, curvature, area, roughness |
| | 3D surface measurement | Step height, volume, surface roughness |
| | Z range (depth of field) | 23000μm |
| | 3D measurement accuracy (10X) | ±2μm |
| | 3D repeatability (10X) | ±1μm |
| | 3D measurement report | Support, editable template |
| 2D measurement | 2D calibration ruler | Support |
| | 2D manual measurement | Point-point, point-line, line-line,Parallel, perpendicular, |
| | Counter | polygon, circle, arc, concentric circle, circle-circle, ang |
| | 2D measurement accuracy (10X) | ±2μm |
| | 2D repeatability (10X) | ±2μm |
| | 2D measurement report | Support |
| Input | Mouse input | USB mouse |
| | Keyboard input | USB keyboard |
| Interface | Optics | Standard C-Mount |
| | Video | HDMI 2.0 |
| | Internet connection | Fast Ethernet |
| | USB | USB2.0 x 3, USB3.0 x1 |
| Others | Storage capacity | Built-in 32G Emmc |
| | Power supply | 12V 8A |
| | Weight | 2.5kg |
| | Appearance size (WxHxD) | 87cm*181cm*103cm |
| | Working environment | 5°C-40°C (temperature), 45%-85% (humidity) |



Biological Observation


Parts Measurement



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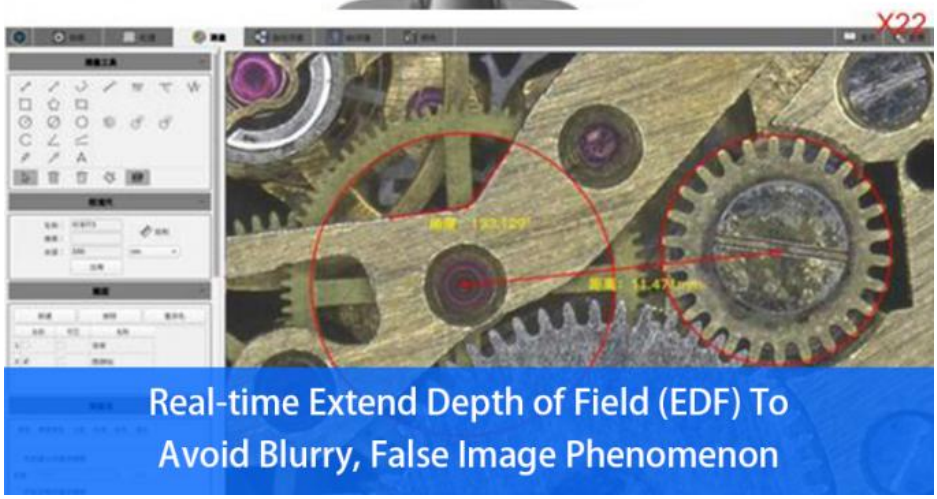



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