



Professional manufacturer of video microscope

## TVN-4K800 SERIES VIDEO MICROSCOPE

ShenZhen Troy Intelligent Group

[www.Troysupply.vn](http://www.Troysupply.vn)

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## Product introduction

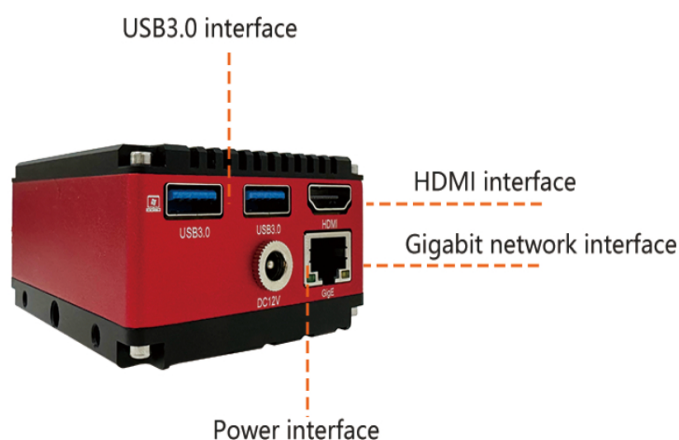
### Meeting the needs of our customers is the company's first priority.

The company offers video microscopy solutions that make industrial inspection easier, more convenient and more efficient. At the same time, ergonomic issues such as operator comfort and wafer safety are particularly important when integrating microscopes successfully into production lines, and we focus on addressing such issues. The company has been providing new ideas, solutions and technical support to a wide range of industries, including semiconductor wafers, flat panel displays and electronic devices



### Product Features

TVN-4K800 series video microscope adopts infinity optical system, this series is equipped with high depth of field, high objective distance lens, high-definition industrial camera, using embedded system directly connected to the monitor imaging, can effectively reduce personnel's visual fatigue, improve the operator's inspection speed and inspection accuracy, suitable for production line full inspection, process analysis, etc.





## Performance features

### Digital imaging systems:

- ◆ HD 2 megapixel, 1920\*1080P resolution, HDMI output
- ◆ 60/fps high speed image capture with no trailing images or delays;
- ◆ Edge profile enhancement mode, which enhances the sharpness of the body image, resulting in a clearer, more three-dimensional image.

TVN-4K800			
<b>Image specifications</b>	3840x2160*24Bit	<b>Main frequency speed</b>	1.2Ghz
<b>Frame rate</b>	60/fps	<b>Output Connector</b>	2 USB 3.0 Port Ethernet HDMI
<b>Optical size</b>	1/1.8 inch	<b>Crosshair function</b>	Overlay or cancellation
<b>Pixel size</b>	2x2um	<b>Lens interface</b>	C
<b>Colour adjustment</b>	R, G, B independently adjustable	<b>Power supplyS</b>	DC 12V-24V
<b>Chip structure</b>	UltraHD SmartIP camera SOC	<b>Dimensions</b>	86x66x45mm
<b>Operating systemt</b>	LINUX	<b>Weight</b>	150g
<b>Kernel structure</b>	ARM Coretex-A55	<b>Operating temperature</b>	0-70°C

- ◆ Optical system, magnification ratio 1:6.5;
- ◆ Objective magnification range 0.7x to 4.5x;
- ◆ Standard working distance 90 mm;
- ◆ Has a modular design and can be equipped with a CCD receiver or additional objective lenses to suit a range of magnifications from 7x to 200x.





### Column bracket:

- ◆ Standard with column stand, base size 380\*250mm, column height 360mm, lifting range up to 300mm;
- ◆ Focusing range of 60mm for observation of very large workpieces;



### Lightsourceconfigurat

- ◆ 4.5W high brightness LED ring light source, adjustable brightness, long life, low heat generation;
- ◆ Soft, natural light without strobe; optional transmissive or oblique light source.





## Displays:

- ◆ Equipped with a 13.3" HD monitor with HDMI HD output and 1080P real time resolution,
- ◆ High-strength metal casing, IPS screen technology, colour rendering more brilliant and realistic, restore the most realistic product characteristics.
- ◆ Optional monitor available.

## Details:



### Metal focusing bracket

Gear lifting and fixing, stable and wear-resistant  
Manual up and down adjustment, free lifting, unobstructed,

### Optical continuous zoom

HD lens, standard optical magnification:  
0.7-4.5X adjustable electronic magnification:  
24-154X adjustable (higher magnification is



### External LED light source

Built-in 64 light beads, soft and bright light,  
long life, less heat, soft light display, no flash  
frequency to protect the eyes of staff

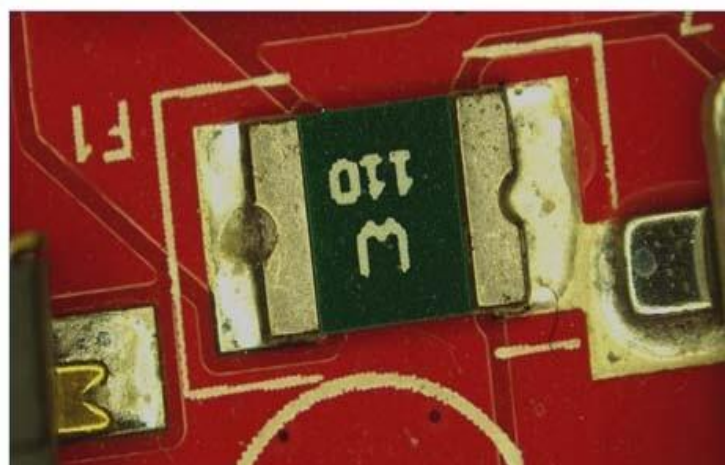
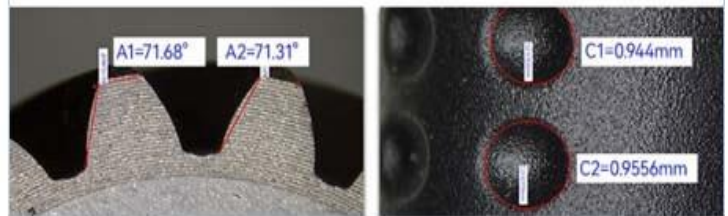
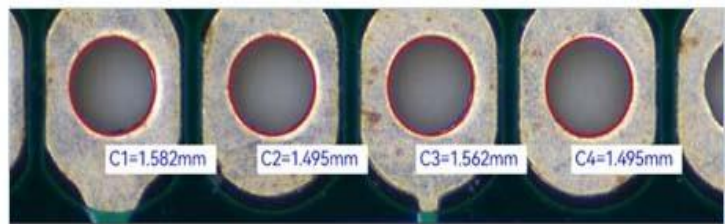


### Interface menu:

The interface menu is organized into several sections:

- Display X:** Includes a 'Lens X' dropdown menu and an 'Imaging X' slider with a grid icon.
- Auxiliary tools:** Contains icons for Freeze, Capture, Video, Edge, AE, WB, Pen, and Notes.
- Compare:** Includes icons for Folder, Graphics Setting, Camera Setting, and System Setting.
- Measuring tools:** A large section with various geometric measurement tools like lines, circles, and polygons, along with a text tool (T).
- Crosshair:** Features a 'Switch' (currently on) and options for 'No scale' and 'With scale', with input fields and 'OK' buttons.

### Case Photos:





## ❑ Measuring Microscope Functions:

- Measuring the length of a line and the distance between two points
- Measuring the angle between a straight line and a horizontal line
- Measuring the distance between two parallel lines
- Measuring the minimum distance from a line to a circle
- Measuring the minimum distance between two circles
- Measuring the angle between a straight line and a vertical line
- Measuring the distance between three parallel lines
- Measuring arc lengths and angles
- Measuring the radius diameter circumference and area of concentric circles  
distance from the Centre of measurement point to the meta
- Measuring the distance from a line to the Centre of a circle
- Measuring the length of a vertical line and the distance between two points
- Measuring the angle between two lines