TROY INTELLIGENT

ELECTRONIC MICROSCOPES AND VISION SYSTEM BROCHURE

2024 / 2025

The best solution of PCBA/LCD Screen Checking and Measuring Tools in Vietnam!



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About Us

TROY VN company (Manufacturer was founded in 2009 in Nanshan District, Shenzhen, China) is a high-tech company dedicated to the field of industrial video images, integrating R&D, design, production and sales.
TROY VN company focuses on serving the visual inspection industry. The image technology solutions owned by the company are all derived from its own intellectual property rights. It has a number of patents and has been at the leading level in the industry for many years.

TROY VN has a group of professional video and image development talents, and has been committed to the research and development of video and image products. After years of accumulation, we have a number of patented technologies and software copyrights. Especially in the fields of image visual detection, image analysis and processing, image identification, etc., it has made great progress.

At present, the company has launched the SMARTGO intelligent visual inspection camera based on the LINUX platform. The hardware is built with FPGA+ARM, and the software is developed with C++. SMARTGO camera integrates nearly a hundred kinds of visual detection, measurement, positioning and recognition algorithms. Users only need to make simple settings to complete a detection project. Make the implementation of visual inspection projects easier and faster.

TROY VN pursues professionalism, technological innovation, constant pursuit of technological development, and the use of technology to create real value. At present, TROY VN has the industry-leading innovation ability, can dig deep into customer needs, and continue to launch high-tech products with various unique functions and technical content. After years of hard work, the company's products have been widely used in industrial inspection, microscope imaging, machine vision, biomedicine, teaching and other fields, with customers all over the country, the United States, Japan, Germany and other countries. Partners include Sony, Panasonic, Foxconn, Flextronics, Pegatron, Lianzhan Technology, Huaqin Technology, Great Wall Technology, Enoch and other well-known domestic and foreign enterprises.

TROY VN company is willing to cooperate with partners to innovate continuously, develop hand in hand, and strive to create value. Our tenet: take innovation as driving force, quality as life, and serve global customers.



TROY INTELLIGENT

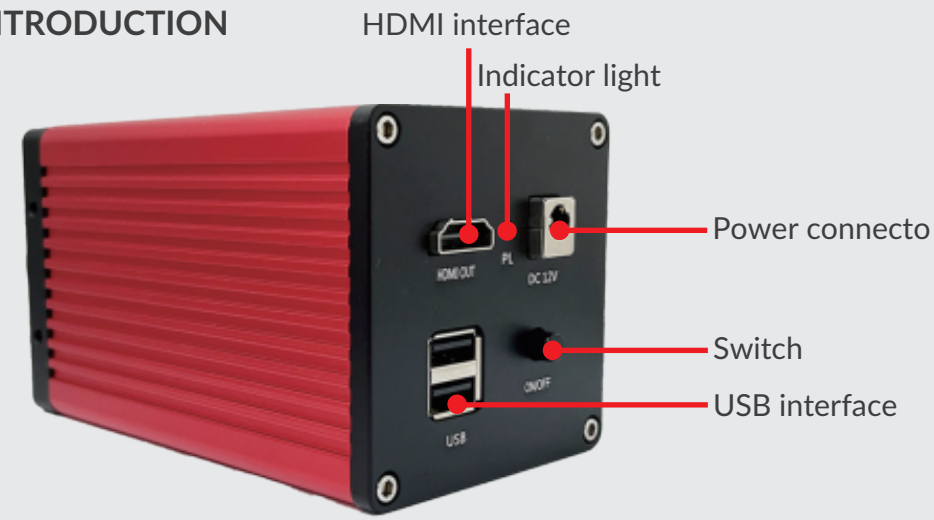
TVN-3500AF LARGE FIELD OF VIEW AUTOFOCUS CAMERA



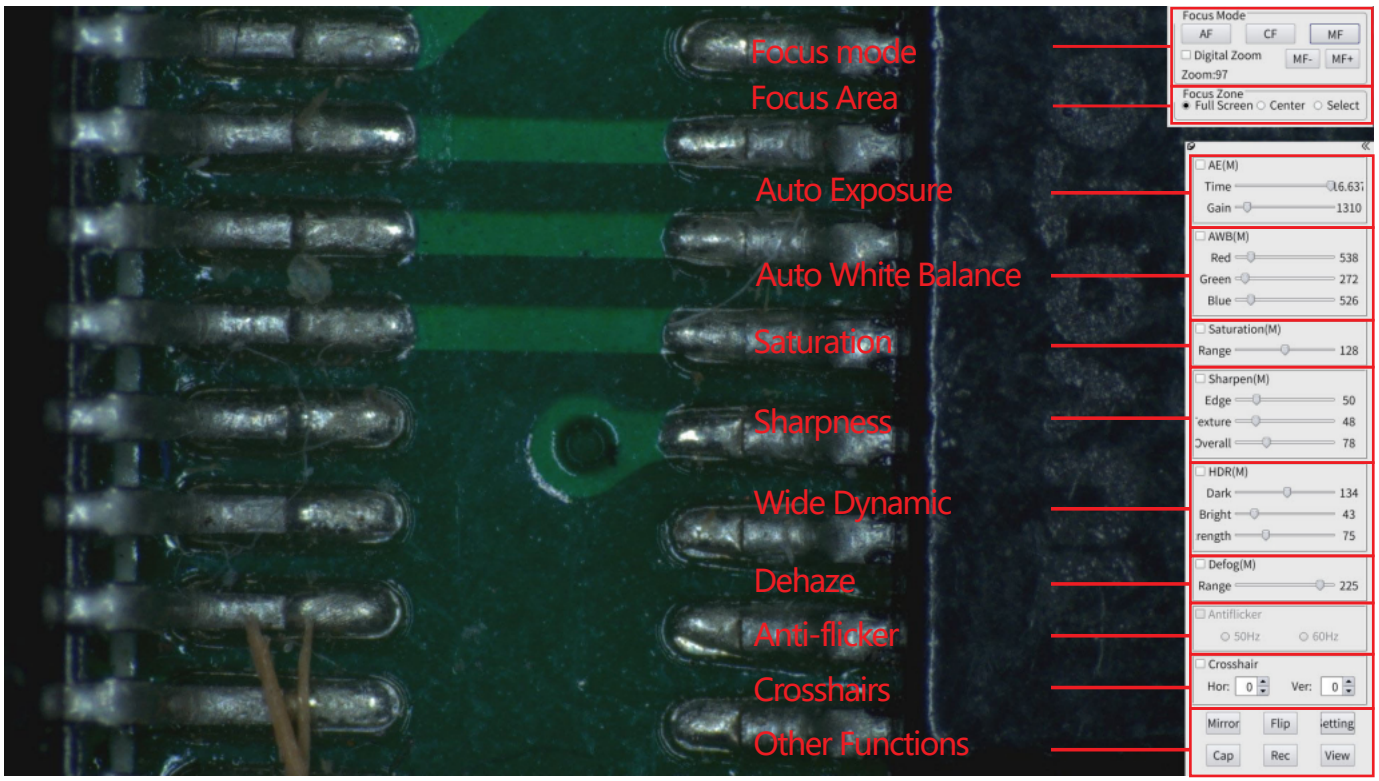
Large field of view industrial camera. Built-in precision optical focusing system, combined with software fast algorithm, can auto-focus in real time, within the adjustable range, no need to adjust, auto-focus, clear picture rendering. The camera outputs HD HDMI video signal, automatic exposure, automatic white balance, automatic adjustment of saturation, automatic wide dynamic. The camera has image storage, video recording, reference determination and other functions. Simple operation, with the mouse can complete all the operation work.

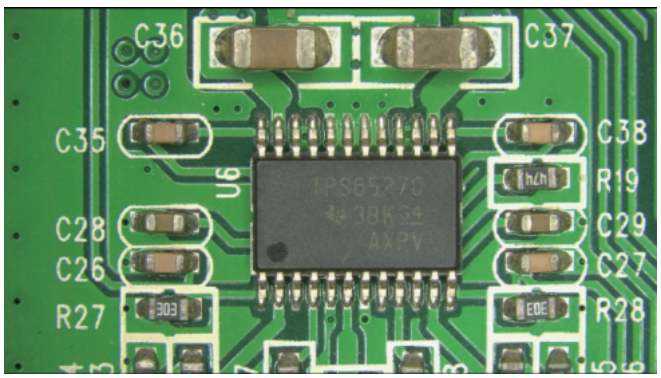
Three types of focus: full screen focus, center focus, spot focus
Auto zoom: Minimum magnification field of view 310mm, 0.65X.
Maximum magnification with a field of view of 38mm, 14X.
With video recording function and USB Flash Drive Storage.

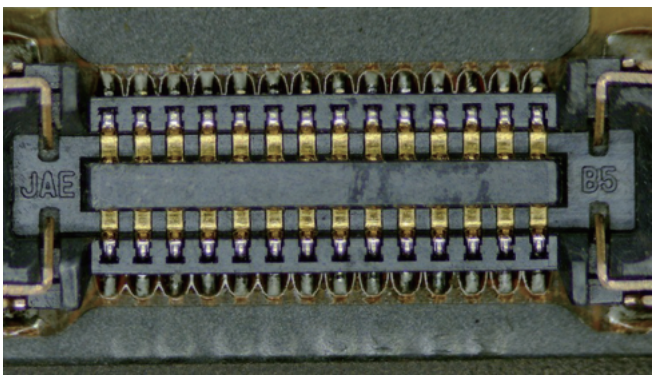
CAMERA INTRODUCTION

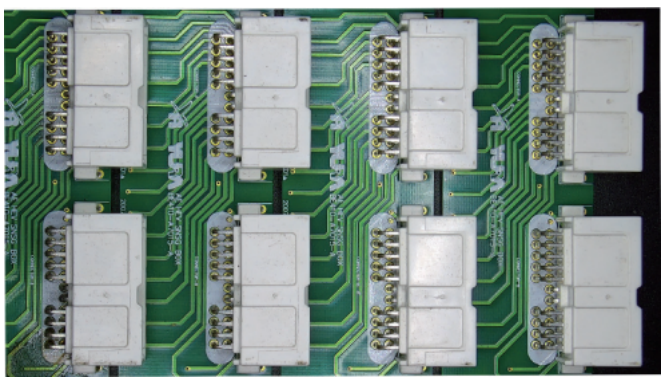


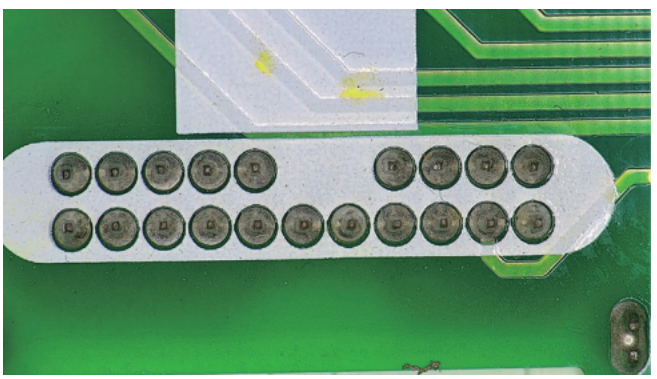
TVN-3500AF LARGE FIELD OF VIEW AUTOFOCUS CAMERA			
Optical Size	1/3”	Operating System	LINUX3.10
Resolution	1920*1080	Main Frequency Speed	1GHZ
Kernel Structure	Dual-Core Cortex-A9	Frame Rate	60fps
usb interface	2 usb interface	Operation method	Mouse operation
Optical magnification	14X	Operating temperature	-10-70 degrees
Operating Voltage	DC 12V	Dimension	70*70*140mm
Chip structure	HIS+ARM	Weight	300g


Focus mode
Focus Area
Auto Exposure
Auto White Balance
Saturation
Sharpness
Wide Dynamic
Dehaze
Anti-flicker
Crosshairs
Other Functions
Focus Mode
AF
CF
MF
Digital Zoom
MF-
MF+
Zoom:97
Focus Zone
Full Screen
Center
Select
AE(M)
Time
Gain
1310
AWB(M)
Red
538
Green
272
Blue
526
Saturation(M)
Range
128
Sharpen(M)
Edge
50
Overall
78
HDR(M)
Dark
134
Bright
43
Defog(M)
Range
225
Antiflicker
50Hz
60Hz
Crosshair
Hor:
Ver:
Mirror
Flip
Cap
Rec
View


C36
C37
C35
C38
R19
C28
C29
C26
C27
R27
R28


JAE
B5





TVN-800+P3D MANUAL ROTATION 3D VIEWING MICROSCOPE

With the development of the times, people's demand for microscope functions has become richer and richer. Compared with the traditional optical microscope, the video all-in-one machine has the advantages of automatic magnification recognition, digital magnification, easy observation, easy data preservation, intelligent operation, etc., which can significantly reduce the fatigue of long-time operation; one key can be turned on to achieve high-definition video image observation, which brings users a fast and comfortable experience .

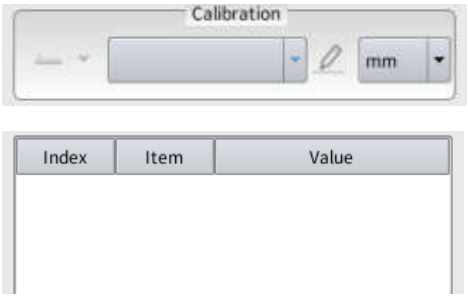
Integrated continuous zoom optical lens and high-definition digital camera, display, camera, ring light are unified by the mirror body power supply, save working space, make the work more arbitrary, solve the long-troubled your wire harness problem.With a user-friendly operating experience using horizontal zoom design, users can fully rest their elbows on the workbench during focusing and zooming, optimizing the operating feel.

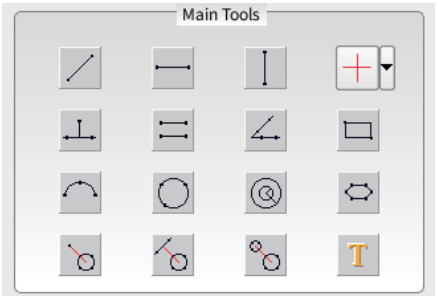


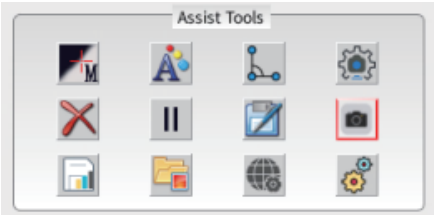
- HD real-time video output
- Optical 0.7-4.5x magnification
- Physical magnification 10-100 times
- High brightness LED light source
- 64 adjustable reference lines
- Auto white balance
- Automatic exposure
- Image save output
- Measurement data report output
- Graphical parameters selectable
- Image comparison
- Graphical overlay
- Automatic edge finding
- More than 40 measurement tools for ease of use
- Optional 3D imaging components

TVN-800 ELECTRON MICROSCOPE			
Camera Model	TVN-800	mage specifications	1920*1080*24Bit
Chip structure	FPGA+ARM	Optical Size	1/2"
Operating System	Dual-Core Cortex-A9	Main Freauency Speed	1GHZ
Data saving	With image of measurement results or excel data saving		
Measurement method	Mouse operation, intelligent point selection / manual point selection		
Access Point	2 USB ports, can be connected to U disk, wireless mouse		
Operating Voltage	12V	**Frame rate**	60 fps@1920*1080
Dimension	260*320*350mm	**Operating temperature**	0-70 degrees
Field of view	4mm-26mm	**Working distance**	60mm-180mm
Magnification	10 6X-80X	**Goggles**	0.4X standard
Measurement Tools	oetween two points, point to line, three point circle, circle center distance, concentriccircle, point to circle line to circle, parallel line, rectangle, angle, radian, polyqon		

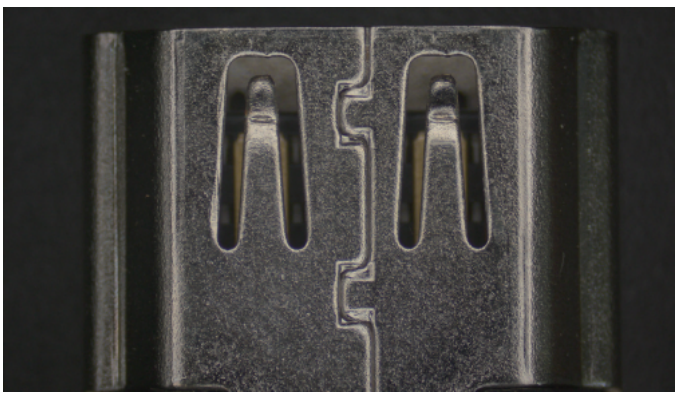
TVN-800 HD measurement all-in-one machine, easy to use, neat appearance, lens light source integrated with one. Built-in personalized interface editing function, template application, mouse operation, U disk storage, including automatic edge finding, automatic contour, horizontal and vertical flip, line/circle calibration, data export, playback browsing and other functions. And provide "parallel line", "point to line", "concentric circle", angle, radian ..... and many other measurement tools.

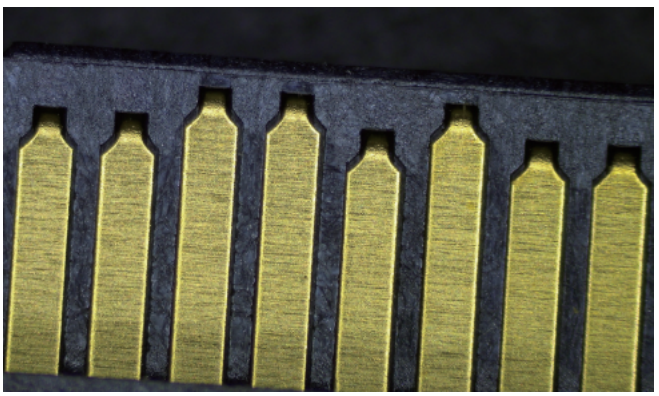


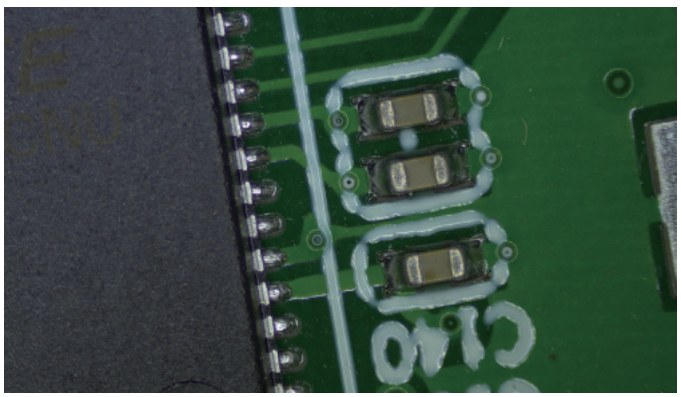


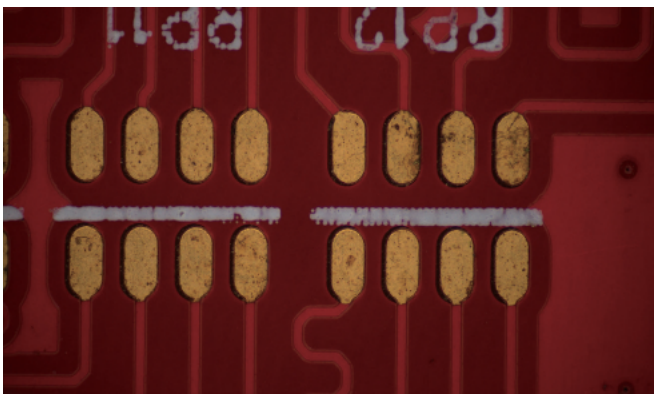


Ultra HD imaging: excellent picture quality, clear and true colors.
One-piece body: Sturdy and environmentally friendly one-piece body design reduces maintenance,
extends service life and improves work efficiency.
Modular design: users can choose the structure according to actual needs and customize the match.
Beautiful and simple product, easy to operate.









TVN-MT60 Metallographic Microscope

TVN-MT60 Metallographic microscope is applied to semiconductor industry, silicon manufacturing, electro nic information industry, metallurgical industry, medical testing, scientific research Research and other high-end manufacturing and research and development of an optical inspection equipment.

As a high-end Metallographic microscope users can experience its As a high-end metallurgical microscope users can experience its excellent image effect and clear microscopic world under high magnification. MT60 microscope can be widely used in semiconductor R&D and manufacturing, FPD, circuit FPD, circuit packa ging, circuit substrates, materials, castings/metal/ceramic parts, precision mold inspection.



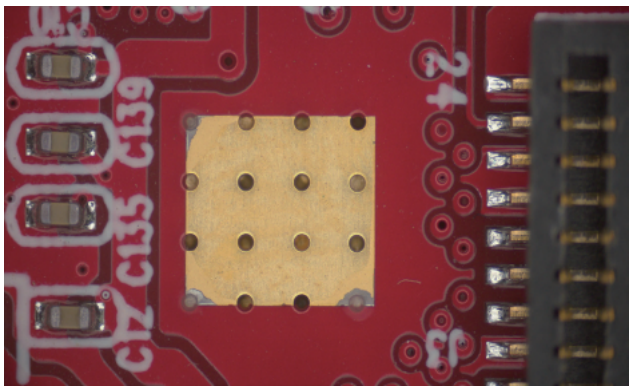


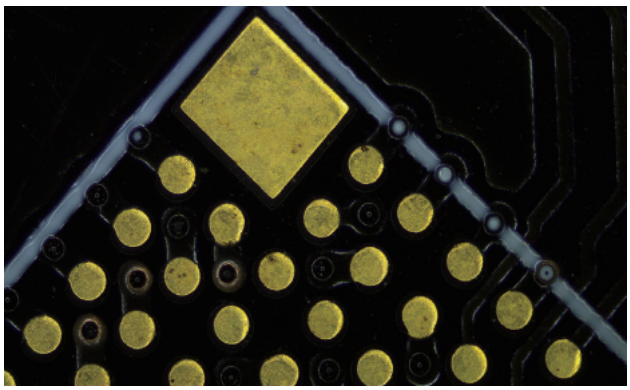


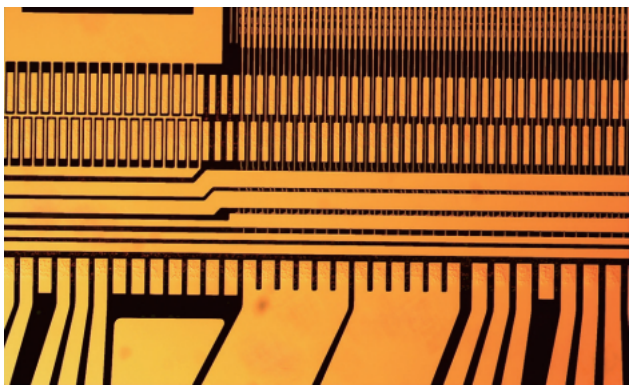


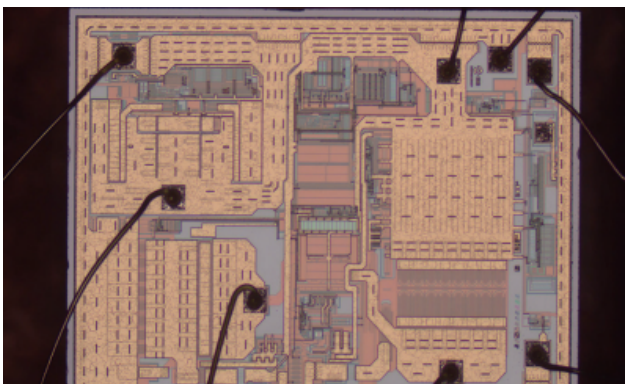


Can provide bright field, oblique lighting, simple polarized light and other observation functions, bright field image high brightness, high resolution, positive color reproduction; oblique lighting can highlight the intuitive three-dimensional relief effect.









Model	TVN-MT60
Optical system	Infinite chromatic aberration corrected bright field optical system
Observation tube	30°tilt, infinity hinged binocular barrel, pupil adjustment: 54mm~75mm, unilateral visual adjustment: ±5 diopters
	30°tilt, infinity hinged tee barrel, pupil adjustment: 54mm~75mm, unilateral vision adjustment: ±5 diopters, two spectral ratios R:T=100:0 or 50:50
Eyepieces	High eye point large field flat field eyepiece PL10X22mm
Objective Lens	Flat field infinity long working distance achromatic bright field objective lens (5x, 10x, 20x, 50x)
Objective Lens Converter	Internally positioned five-hole converter
Coarse and fine focusing mechanism	Dual-purpose frame, low hand position coarse and micro coaxial focusing mechanism,coarse adjustment stroke 28mm, fine adjustment accuracy 0.002mm. with preventing slipping adjustment elastic device and random upper limit device. With platform position up and down adjustment mechanism, maximum sample height 28mm.
	Reflector frame, low hand position coarse and micro coaxial focusing mechanism, coarse adjustment stroke 28mm, fine adjustment accuracy 0.002mm, with anti-slip adjusting elastic device and random upper limit device. With platform position up and down adjustment mechanism, maximum sample height 78mm.
Carrier	Double-layer mechanical moving platform, low hand position X, Y direction coaxial adjustment; platform area 175X145mm, moving range: 76mmX42mm can be equipped with reflective metal carrier plate, trans-reflective dual-use glass carrier plate
Upper Illumination System	Adaptive wide voltage 100V-240V_AC50/60Hz, reflective lamp room, single high power 5WLED, warm color, Cora illumination, with field of view diaphragm and aperture diaphragm, adjustable center, with oblique lighting device
Lower Illumination System	Adaptive wide voltage 100V-240V_AC50/60Hz, transmissive chamber, single high power 5WLED, warm color
Concentrator	Transmissive swing-out achromatic concentrator (N.A0.9) with variable aperture diaphragm, adjustable center
Other accessories	Color filters for transmission: yellow, IF550 filters, LBD filters, neutral filters
	Camera accessories: 0.5X C connector
	Interference filters for reflection: blue <= 480nm; green 520nm~570nm; red 630~750nmLBD

1. Adopted UIS high-resolution, long working distance infinite optical path correction system objective imaging technology.
2. Expanded objective multiplexing technology, infinity objective compatible with all observation methods including bright and dark field method, polarization method, DIC and provide high definition image quality in each observation method.
3. Using aspheric LED lighting to increase the observation brightness.
4. Support long working distance metallographic objective.
5. Can insert the DIC differential interference device converter.
6. Support depth-of-field synthesis.
7. Support network image storage.
8. Equipped with large target surface HD HDMI camera, support more than 50 kinds of measurement tools.
9. Support image comparison.

TVN-3D9000 MOTORIZED DEPTH OF FIELD SYNTHESIS 3D MICROSCOPE

3D Depth Measurement Microscope, using depth of field fusion software algorithms, high-speed real-time images of different focal surfaces complete fusion allows you to see the prod-uct at the same time the image of different heights of the surface, increase the depth of field, improve the picture effect. Solve the problem of small depth of field of microscope head. You can simultaneously watch the uneven electronic devices, various products inside and outside the hole, the same product on the bottom, electronic device pins and the bottom surface.





The lens comes with optical magnification adjustment, minimum 0.7x, maximum 5x optical magnification



High brightness coaxial point light source with 5W power and reliable natural heat dissipation design Stable operation



It is possible to add a 4-hole conversion nose wheel with 4 holes for 5x, 10x, 20x and 50x objective lens.



The product is equipped with a 10X flat field objective lens by default. The working distance is 17.7mm, the aperture is 0.30mm, and the diameter of the lens interface is 20.2mm.



Table size 200*180mm,stroke range 100*109mm.XY moving manually,moving accuracy 0.01mm.



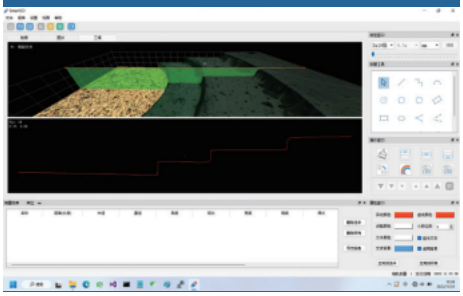
The Z-axis is driven by high precision stepper motor and reads the accurate scale to measure the distance with the accuracy of 0.1um, which can ensure the accuracy of the measured dimension.



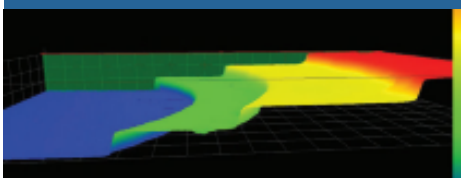


Camera Model	TVN-3D9000
Chip Structure	FGA+ARM
Optical Size	1/1.2”
Resolution	1920*1080
Pixel Size	3.75*3.75μm
Operating System	LINNUX3.10
Kernel Architecture	Dual-core Cortex-A9
Speed	1GHZ
Frame Rate	30fps
Color Adjustment	RGB three-channel individual adjustment
White Balance	Auto Exposure
Mirroring	Upper and lower mirroring, left and right mirroring
Operating Voltage	DC 12V
Network Interface	1000Mbps
Video Interface	HDMI
Wide Dynamic	Support Wide Dynamic

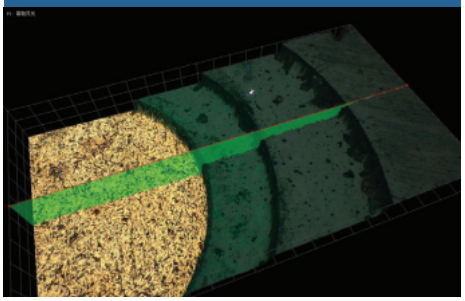
stereoscopic 3D imaging



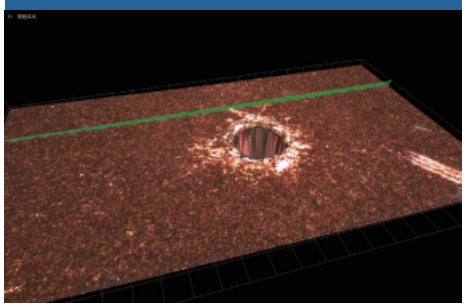
Chromatogram Height



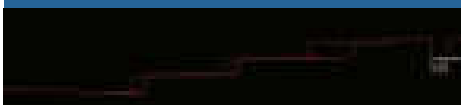
The cutting line can be dragged at any angle



Fast generation of super depth of field images



Profile height measurement





Maximum sampling images 200
Minimum sampling pitch 0.1um
Optional filtering to filter out interference noise. Fast sampling speed
Motorized Z-axis, can provide six kinds of up and down running speeds

Lens parameters		
Magnification	**Minimum 0.75X**	**Maximum 5.25X**
Magnification	1:7（0..75X-5.25X)	
Ratio Depth of Field	0.95mm	0.085mm
Resolution	7.5μm	2μm
Field of view	8.7*11.7mm	1.2*1.6mm
10X objective lens (standard)	Working distance	Working distance
	11mm	0.9μm

Lens parameters			
Resolution	1920*1080	Z-axis accuracy	0.1μm
Pixel Size	3.75*3.75μm	Carrier size	220*180mm
Target size	1/1.2"	Stroke	109*100mm
Frame rate	30fps/s	Working height	0.5-70mm
Auto White Balance	Auto White Balance	Power supply	DC 12V2A
Auto Exposure	Auto Exposure	Weight	13KG
Number of Image Acquisitions	3-200 shots	Working temperature	-10-70°
Image Mirroring	Upper and lower mirroring, left and right mirroring		

TVN-HD500 HD Real Image Microscope

We are constantly pursuing new technology application and intelligent convenience to make the microscopic world beautiful and easy to operate, so that difficulties no longer hinder your work. We keep working hard and will continue to pursue the continuous progress of microscope to create the ideal visual observation equipment and intelligent inspection equipment for our customers.

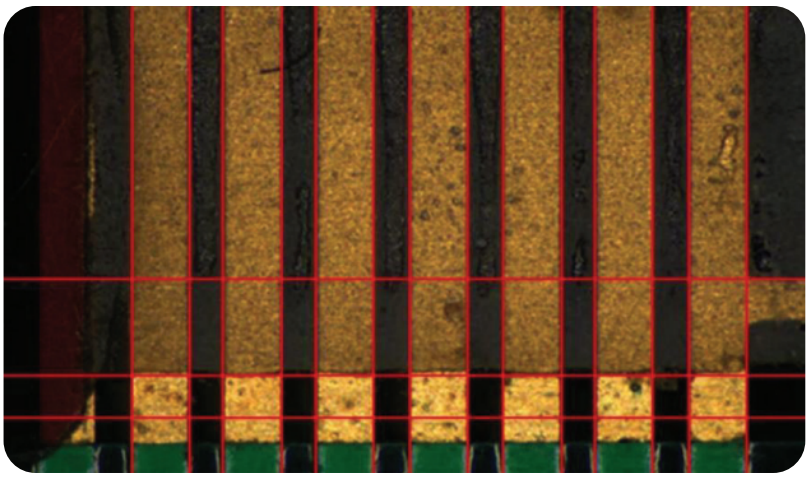


- 1080P high-definition images
- Camera built-in software, no computer required, USB mouse operation
- U disk storage
- With motorized depth of field
- 64 reference horizontal and vertical lines
- Various measuring tools
- 1/1.2 inch large target surface camera
- Clear image, rich color

Camera parameters			
Chip structure	FPGA+ARM	**Kernel structure**	Dual-core Cortex-A9
Operating System	LINUX 3.10	**Optical Size**	1/1.2"
Main Frequency Speed	1Ghz	**Interface**	2 USB (Mouse/U disk)
Resolution	1920*1080	**Image Element**	5*5μm
Frame Rate	60fps	**White Balance**	Auto
Strong light suppression	Continuously Adjustable	**Built-in crosshairs**	64 horizontal and vertical lines
Edge Enhancement	Adjustable	**Video Output**	HDMI digital output
Operating Temperature	-10℃-70℃	**Voltage Output**	DC 12V
Color Temperature Adjustment	RGB independently adjustable	**Lens connector**	C Interface
Color Temperature Adjustment	450g	**External Dimensions**	61*61*76mm

Parameters of the whole machine			
Output Interface	HDMI	**Magnification**	27-230X
Center distance	150mm	**Eyepiece**	1X
Column height	318mm	**Objective lens**	0.6-5X Multi-speed adjustable
Dimension of the whole machine	330*300*320mm	**Optical magnification**	0.6-5X (customizable)
Lamp bead	56 LEDs	**Working Distance**	86mm
Power input voltage	AC100-AC240V	**Focusing range**	40mm
Column size	32*318mm	**Inside and outside diameter of column**	95/63mm
Display	21 inch	**Wattage**	4.5W





TVN-4K800 SERIES VIDEO MICROSCOPE

Main Features:



HD 8 million pixels, 3840*2180P resolution, HDMI output
60/fps high-speed image capture, no delay Suppress strong reflection function to meet observation of highly reflective products an reduce reflections
Edge contour enhancement mode improves clarity of volumetric images, making the im appear clearer and three-dimensional

Specifications of Electron Microscope	
Chip structure	ULTRA HD SMART IP CAMERA SOC
Operating system	LINUX
Kernel structure	ARM CORTEX A55
Main frequency structure	1.2GHZ*4
Intelligent unit computing	Built-in intelligent computing acceleration engine and built-in binocular depth acceleration unit. Built-in matrix calculation acceleration unit
Video output	HDMI digital output
Optical size	1/1.8INCHES
Pixel size	2.0*2.0μm
Resolution	3840*2160
Frame rate	60fps
Operating temperature	-20-7^{0}C
Dimensions	320*260*450mm
Voltage input	DC 12V
USB Interface	USB3.0*2
Network Interface	1000MBPS
Lens mount	C-MOUNT
Weight	4Kg

TVN-600 DOLPHIN BODY MICROSCOPE

With the development of the times, people's demand for microscope functions has become richer and richer. Compared with the traditional optical microscope, the video all-in-one machine has the advantages of automatic magnification recognition, digital magnification, easy observation, easy to save data, intelligent operation, etc., which can significantly reduce the fatigue of long-time operation; one key can be turned on to achieve high-definition video image observation, bringing users a fast and comfortable experience.

Integrated continuous zoom optical lens and high-definition digital camera, display, camera, ring light are unified by the mirror body power supply, saving work space, making the work more arbitrary, solve the long-standing problems you bother.



- 0.7-4.5X optical magnification adjustment, physical 10-160x magnification
- High brightness LED ring light source, dynamic adjustment
- Automatic edge finding
- Automatic circle finding
- External trigger to capture the picture
- Image saving and exporting
- Data saving and exporting
- Zoom without blurring
- Graphical comparison
- 40 measurement tools



Adopts 2 million CMOS HD image sensor



11.6-inch resolution 1920 × 1080 high-definition LCD screen



External USB flash drive (2.0) storage, supporting up to 128G image storage in real time.

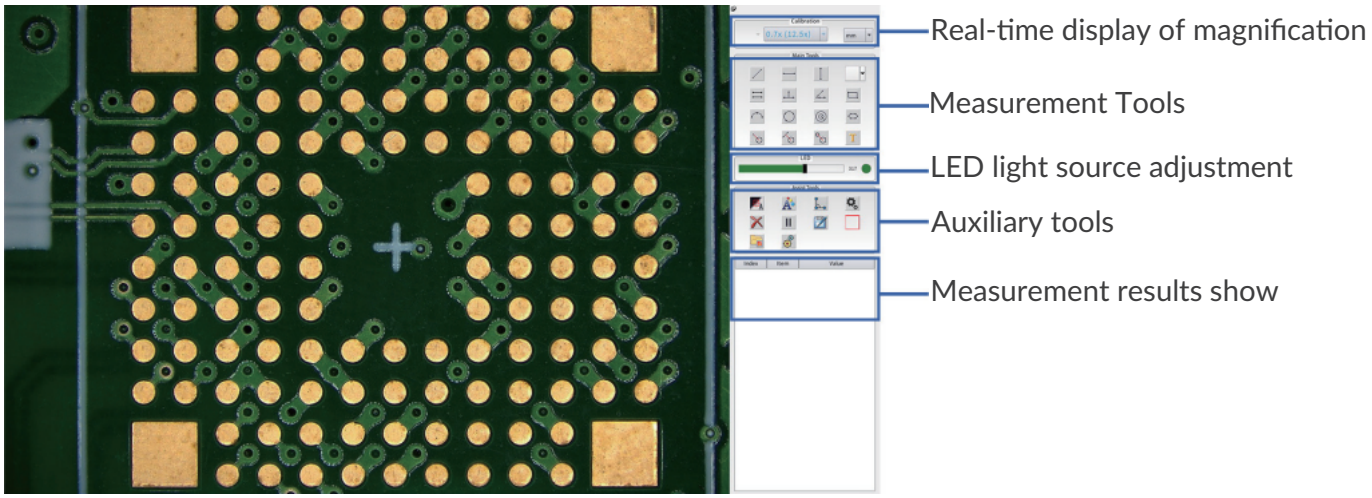


LED ring drop light illumination with on-screen menu for brightness adjustment

Product parameters

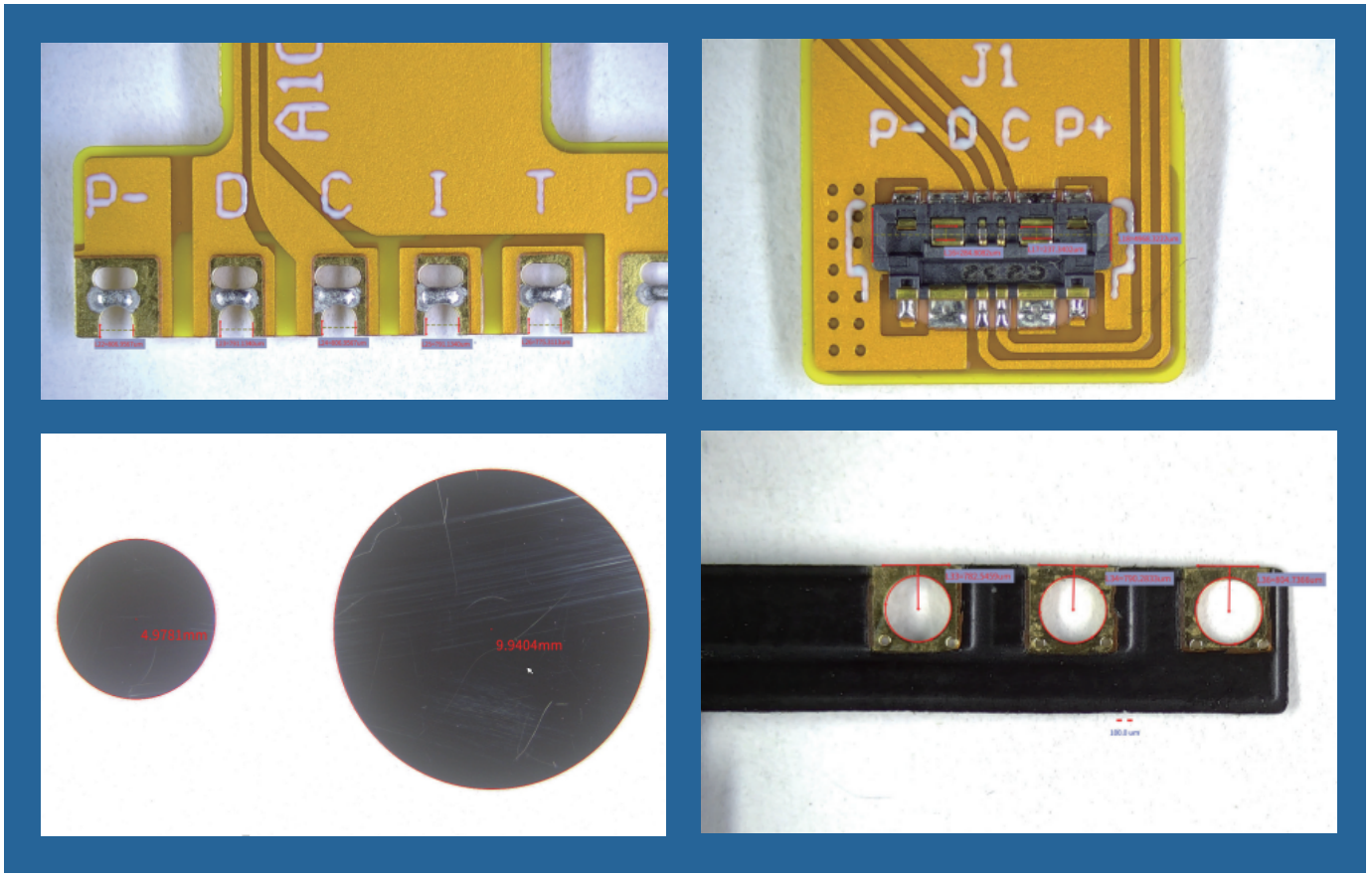
Dolphin Body Microscope			
Optical Size	1/2”	Optical magnification	0.7-4.5X
Resolution	1920*1080	Magnification	12-80 times
Frame Rate	60fps	Field of view	1-22mm
usb interface	2 usb interface, can connect U disk, wireless mouse		
Displays	11.6-inch LED high-definition display		
Operation method	Mouse operation	Operating temperature	-10-70 degrees
Working distance	60mm	Dimension	320*260*380mm
Operating Voltage	DC 12V	Weight	4kg

Microscope is different from microscope in general sense, it has many powerful software functions integrated in addition to the basic magnification function, and these functions can solve the tricky problems in production or research.



Product Features:

1. Without connecting to the PC, you can directly connect to the LCD monitor and watch the video images.
2. 2 Million 70 thousand high-definition CMOS image sensor, video images clear, smooth.
3. Support automatic exposure, automatic white balance, and manual adjustment of exposure speed, RGB gain.
4. 30 groups of cross lines for choice, you can freely adjust the 8 sets of cross line position and color.
5. HD high speed, 60 frames, no shadow, no light reflection.
6. HDMI HD digital output



TVN-3800 Measuring Microscope

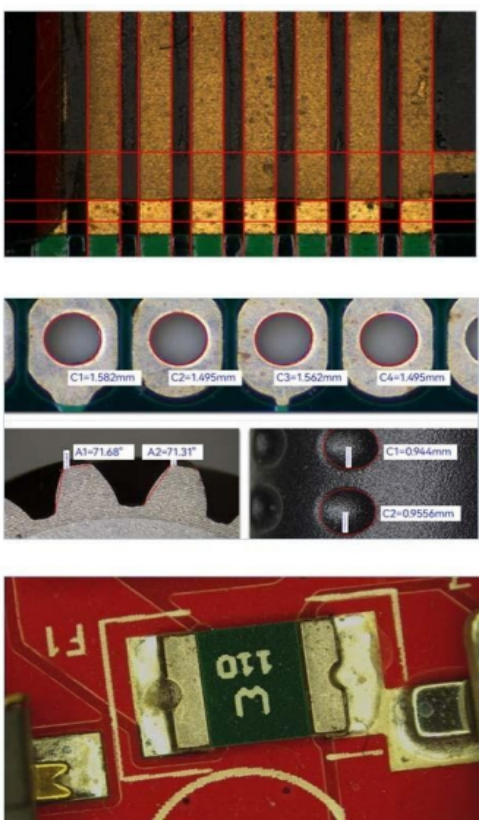
- Model basic editing tools. Easy to use, integrated measuring tools, image.
- Modular design and can be equipped with a CCD receiver or additional lenses to accommodate a magnification range of 7x to 200x according to customer needs.

- Model basic editing tools. Easy to use, integrated measuring tools, image.
- Modular design and can be equipped with a CCD receiver or additional lenses to accommodate a magnification range of 7x to 200x according to customer needs.

Image specifications	1920x1080*24Bit	Strong light suppression mode	3 level
Frame rate	60/fps@1920x1080	Edge enhancement mode	3 level
Optical size	1/2”	Crosshair function	Overlay or cancellation
Pixel size	3.75 x 3.75 um	Lens interface	C interface
Colour adjustment	R, G, B independently adjustment	Power supply	5V-12V
White balance adjustment	Single button setting / manual setting	Dimensions	51x51x49mm
Exposure adjustment	Automatic mode / Manual mode	Weight	150g
Contrast adjustment	Manual settings	Operating temperature	0-70^{0}C







TVN-360A AUTO ROTATION 3D ELECTRONIC MICROSCOPE

Introduction:

The 3D electronic microscope can view the detected object 360 degrees, the image is clear and smooth, and there will be no problems such as smearing. The device uses a 2 million high-speed HDMI camera to transmit images in real time, and adds a self-developed image processing algorithm, so the viewing effect is very clear.

At the same time, the camera lens can adjust the magnification, the optical magnification is adjustable from 0.7 to 4.5 times, and with the display, the object can be magnified by 200 times. The lens can be switched between flat mode and 3D mode. There is no difference from other lenses in flat mode. In 3D mode, you can see the product in 360 degrees.

This product is suitable for detecting tiny and precise devices in the production line, and is very suitable for the need to observe the surroundings of the device.



Features:

Three-dimensional viewing plane 3D mode can be switched.
Light source continuous reading adjustable 0.7-4.5X optical magnification adjustable. Image storage Frame freeze, image comparison Strong light suppression, edge enhancement Color Independent Adjustment white balance adjustment Automatically adjust exposure High speed 60 frames per second Mouse operation, U disk read and write.

- HDMI high-definition interface output
- multi-level wide dynamic range
- One key white balance
- Standard C-Mount interface, optional various optical lenses, used in any industrial field 24bits true color image, support computer monitor, progressive display without flicker
- The color can be adjusted independently, with the function of cross center line and movable line, and any graphics can be customized.
- Comply with the international popular high request standard, 1920*1080@60fps; 60 frames of high-speed image capture, no smear or delay;
- New edge enhancement mode is added to enhance special image effects;
- Comply with popular display trends and adapt to widescreen (16:9) displays;
- Brand new color algorithm to ensure true reproduction of image colors;
- User-friendly menu settings, with automatic hiding function;

TVN-360A HDMI CAMERA			
Chip structure	FPGA+ARM	optical size	1/2 inch
operating system	Linux 3.10	pixel size	3.75um*3.75um
kernel structure	Dual-core Cortex-A9	Image Resolution	1920*1080
Main frequency speed	1Ghz	white balance	60fps
optical size	1/2 inch	Suppress glare selection	One key white balance
resolution	1920×1080	Edge Enhancement Mode	3 levels of choice
frame rate	60fps	color adjustment	4 levels of choice
interface	2 USB ports. U disk, wireless mouse or keyboard can be connected	built-in reticle	R, G, B independently adjustable
Operating Voltage	12v	video output	8 movable lines
Operating temperature	-10 degrees -70 degrees	lens mount	HDMI digital output
Dimensions	61*61*72mm	voltage input	C interface
weight	450g		DC 5-12V

LENS PARAMETERS	
Various zoom hosts	Coaxial and confocal throughout the zoom process
Continuous zoom of objective lens	0.7X-4.5X
Zoom ratio	6.4:1
With 1XCCD	The total magnification can be expanded to 50X-300X
With 0.5XCCD	The total magnification can be extended to 25X-150X
Working distance	45 degrees 20mm
Host matching size	Ø 48mm
Light source	Brightness adjustable
Motor speed	Adjustable speed

TVN-350 CLASSIC MICROSCOPE

TVN-350			
Image specifications	1920x1080*24Bit	Main frequency speed	1.2Ghz
Frame rate	60/fps	Output Connector	2 USP Ports, U disk
Optical size	1/3 inch	Crosshair function	Overlay or cancellation
Pixel size	3.75x3.75um	Lens interface	C
Colour adjustment	R, G, B independently adjustable	Power supplyS	DC 12V-24V
Chip structure	HISI+ARM	Dimensions	61x61x57mm
Operating systemt	LINUX	Weight	150g
Kernel structure	Core duel Coretex-A9	Operating temperature	0 - 7^{0}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





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

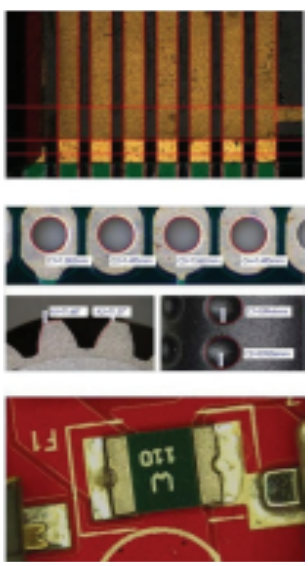


External LED light source
Built-in 64 light beads, soft and bright light, long life, less heat, soft light display, no flash frequency to protect the eyes of staff

Interface menu:



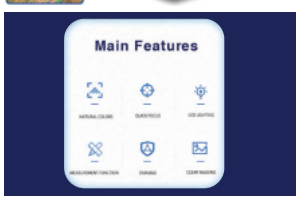
Case Photos:

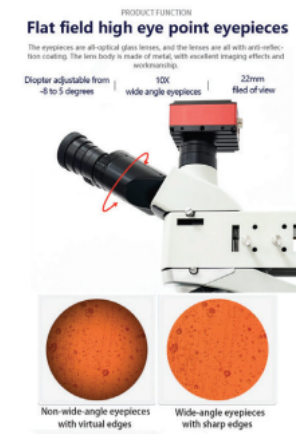




TVN-MT4K80 4K HIGH DEFINITION METALLOGRAPHIC MICROSCOPE













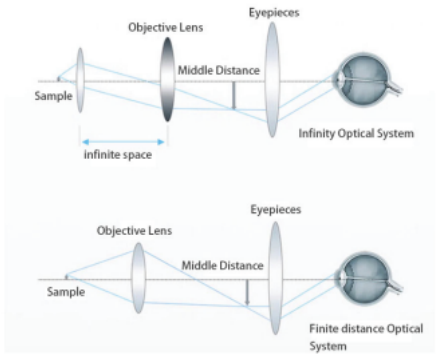


Lens parameters (with 4K camera and 4K monitor)

Objective Lens	Field of View (mm)	Magnification
5X	3.8*2.2	138
10X	2.12*1.2	263
20X	0.96*0.54	540
50X	0.38*0.22	1380

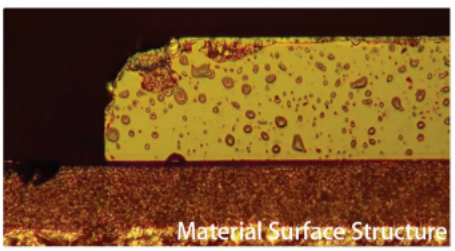
Infinity optical system

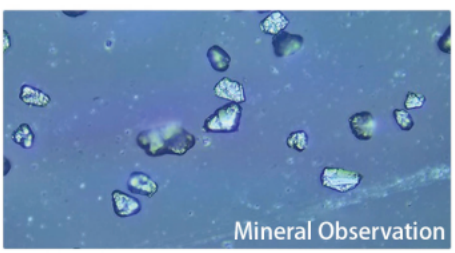
The infinity optical system changes the distance between the objective lens and the imaging lens, but the magnification does not change.Inserting a parallel plane plate between the imaging lens and the imaging lens can also prevent parfocal imaging from deflecting.

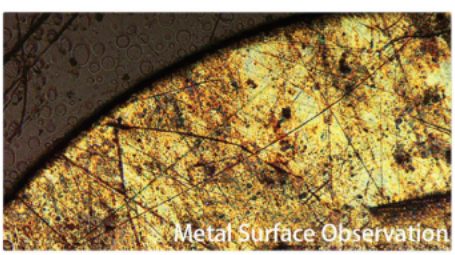


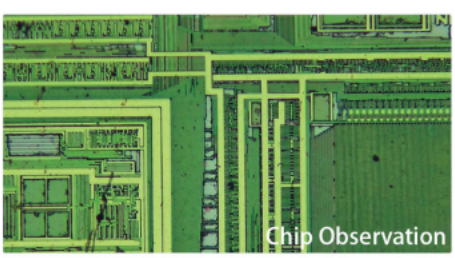
Optical Magnification	500X
Digital Magnification	50-1000X
Eyepiece	High eye point and large field of view plan eyepiece PL10X/18MM
Objective Lens	Long working distance plan achromatic metallographic objectives (5X, 10X, 20X, 50X)
Observation Tube	30° tilt, inverted image, dumpling chain type trinocular observation tube
Converter	Internally positioned five-hole converter
Focusing mechanism	Low-hand position coarse and micro coaxial focusing mechanism, fine-tuning accuracy 0.002MM, with an adjustment elastic device to prevent sliding and a random limit device to prevent damage to the slice and fast focusing, built-in 5W LED transmitted light illumination, up and down illumination switching.
Stage	Double-layer mechanical mobile platform, coaxial adjustment in X and Y directions for low hand position; platform size 140MMX132MM (with 180X145MN flat platform, 102x102MM glass stage) moving range: 76MMX50MM
Reflected Lighting System	Adaptive 100V-240V wide voltage, reflective lamp house, single high-power 5W LED, warm color, with field diaphragm, aperture diaphragm, center adjustable; with color filter slot and polarizing device slot.
Transmitted Illumination System	Adaptive 100V-240V wide voltage, single high-power 5W LED, warm color
Condenser	Abbe condenser, numerical aperture N.A.1.25, with aperture diaphragm and filter holder (critical illumination)
Aperture	Field diaphragm, aperture diaphragm
Camera Accessories	0.5X camera adapter, C-type interface, adjustable focus

Product examples









TVN-S6000N NETWORK MICROSCOPE AND TVN-S6000NMX(Depth of Field Synthesis)



TVN-S6000N

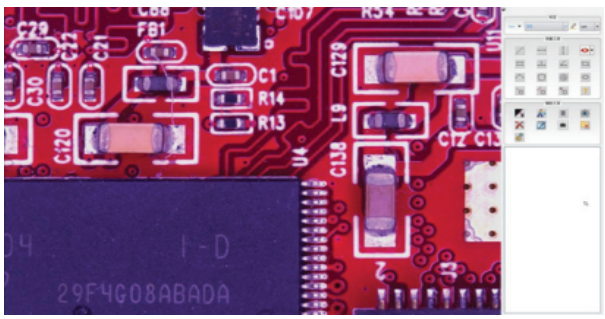


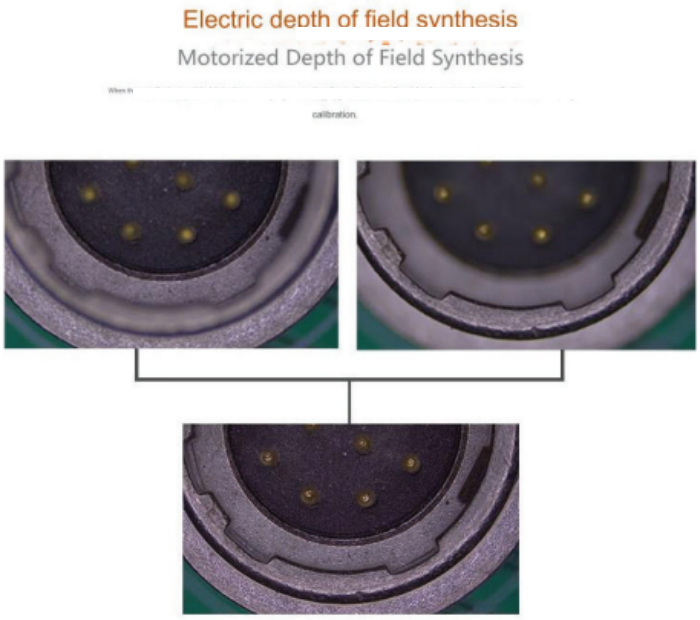
TVN-S6000NMX

Technical Parameters

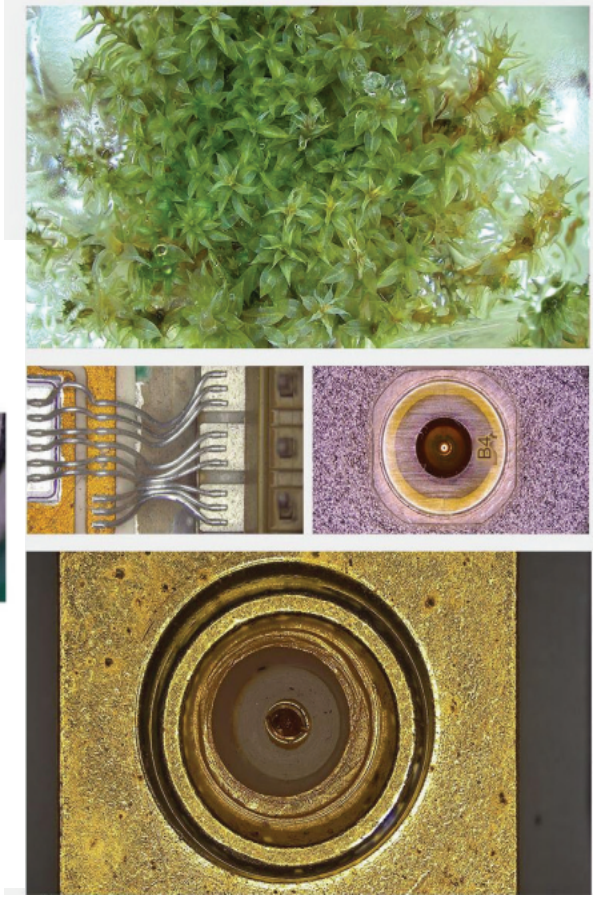
TVN-S6000N and TVN-S6000NMX	
Chip Structure	FPGA+ARM
Operating System	LINUX 3.10
Kernel Architecture	Dual-core Cortex-A9
Speed	1Ghz
Optical Size	1/2”
Resolution	1920×1080
Frame rate	60fps
Measurement functions	Between two points, point to line, three-point circle, distance between center points, concentric circles, point to circle, line to circle, parallel lines, rectangle, angle, arc, polygon
Data Retention	With measurement result image or excel data saving
Measurement Method	Mouse operation, intelligent point selection/manual point selection
Interface	2 USB ports for connecting USB flash drives, wireless mice or keyboards
Operating Voltage	12v
Operating temperature	-10 degrees -70 degrees
Dimensions	71*71*76mm
Weight	500g

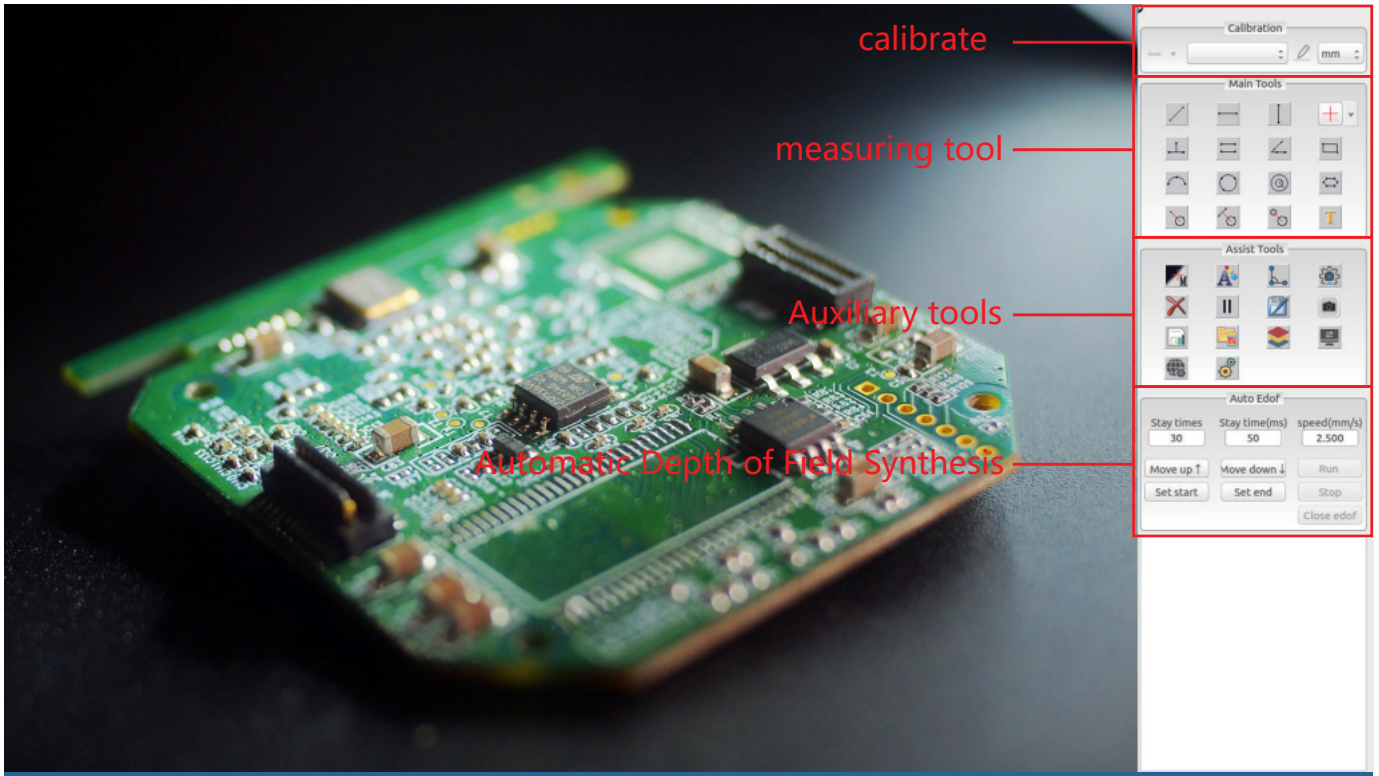
Camera Function Description



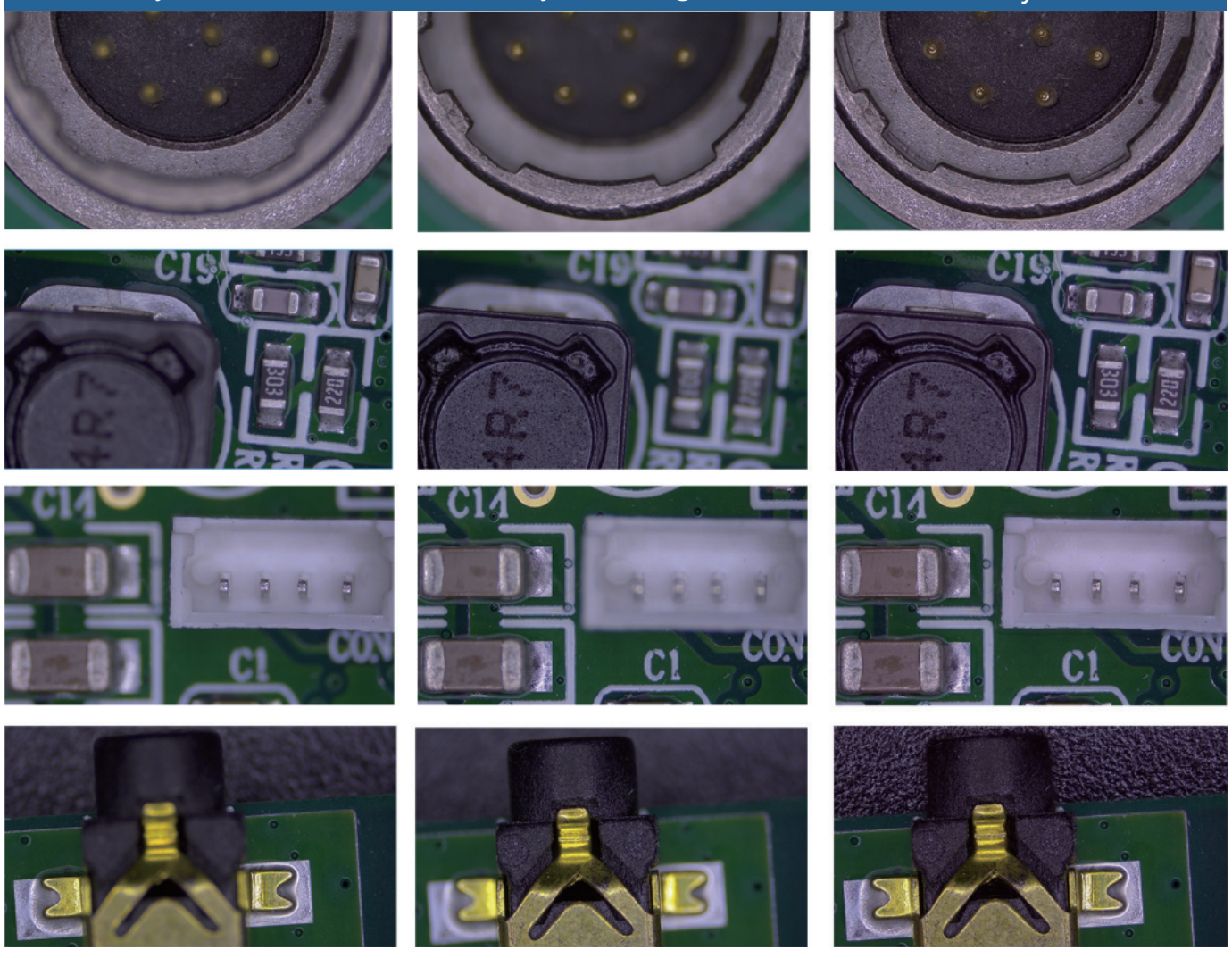


Product Case





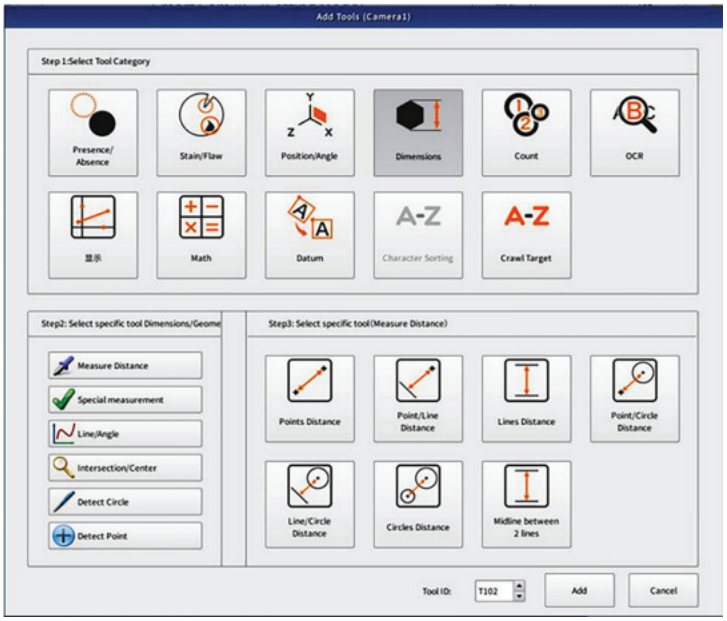
Pre-synthesis	Synthesizing	Post-synthesis



TVN-SMARTGO(-CL/-BW/-P)
INTELLIGENT VISUAL INSPECTION CAMERA



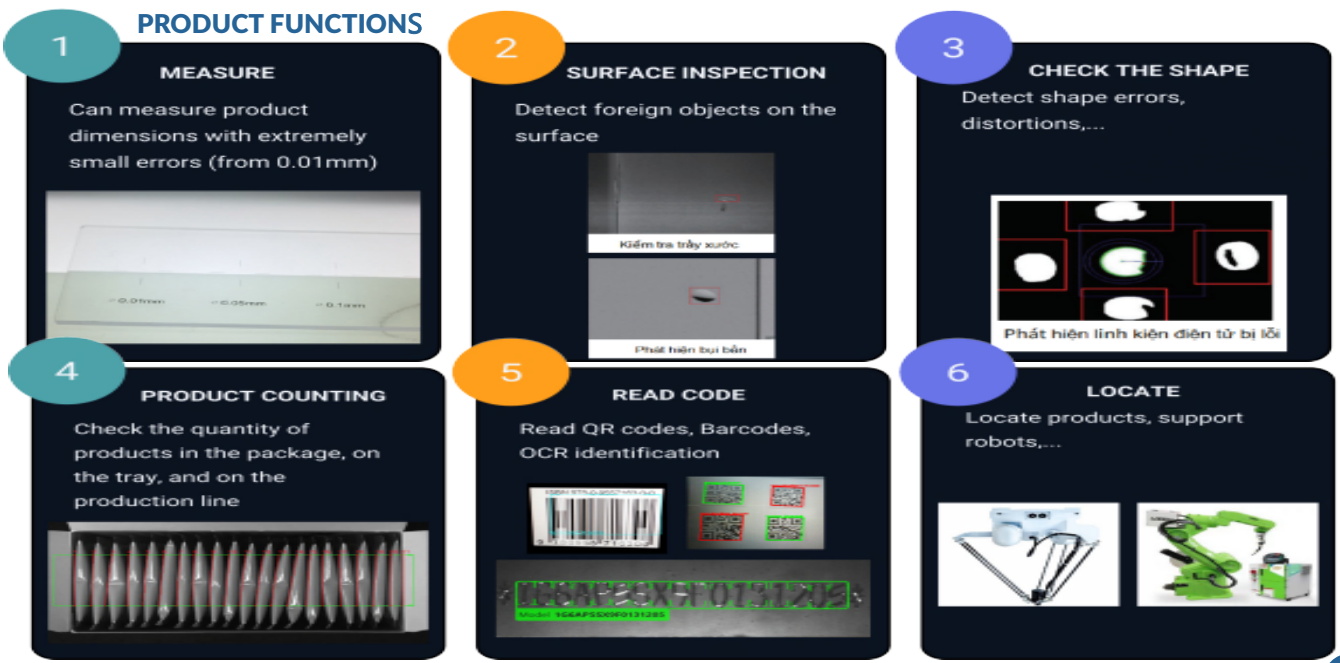
PRODUCT DETECTION TOOLS



TECHNICAL PARAMETERS

SMART-GO			
Chip structure	Xilinx Zynq	**Optical size**	1/1.8inches
Operating system	LINUX	**Pixel size**	2.4um*2.4um
Kernel structure	ARM COTEX A9+ FPGA	**Resolution**	3072*1728 (5.3 million)
Main frequency speed	666MHz	**Frame rate**	30/25 fps
Output Interface	2 USB ports. Can connect to U disk, wireless mouse or keyboard		
IO Interface	3 groups of input, 3 groups of output, 12V level output interface, can be connected to photoelectric switch, wire control switch, PLC, etc.		
Operating temperature	0-70 degrees	**Video output**	HDMI digital output
Dimensions	71*71*67mm	**Lens interface**	C mount
Weight	450g	**Voltage input**	DC 12-24V

PRODUCT FUNCTIONS



CÔNG TY TNHH TƯ VẤN VÀ CÔNG NGHỆ TROY VN

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