

**Used in Various Situations**

**micro**

Micro Square

# DS-3 Series

**For quality inspection, for research and development, and at the manufacturing site - the ultimate in cost performance**

## **PC Type DS-3UX-II**

2M pixel clear image and magnify x1 to x290  
Make adjustable the LED light power  
Measuring software is standard

## **TV & PC Type DS-3N-USB**

You can connect either to the PC or TV and magnify from 1x to 450x  
VGA resolution at 640 x 480 dots  
Conforms to MAX30fps speed  
Conforms to USB2.0 interface on PC Operates on Windows 2000/XP  
Easy storage in JPEG format Measurement of two points

## **TV Type DS-3N**

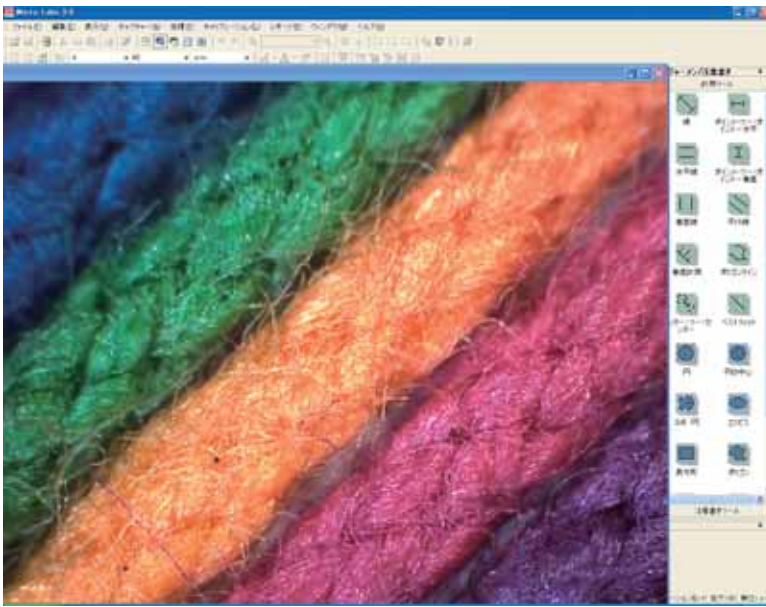
Easy displaying on TV at 410 K pixels  
Magnification from 1x to 450 x (on a 14-inch TV)



**DS-3UX-II**

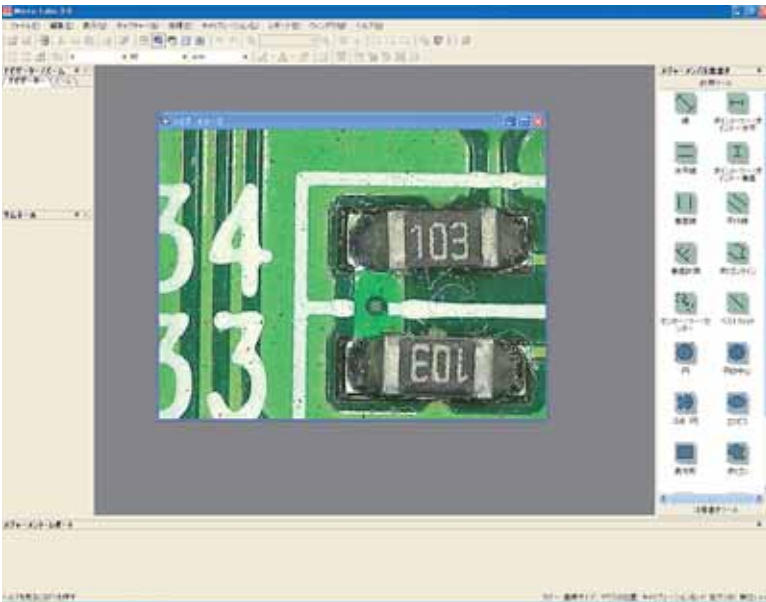


**DS-3N-USB**



PC screen in DS-3UX-II

An image can be displayed on 1600x1200 resolution at 10frame per second.  
 You change the resolution on 800x600 at 30 frames per second.  
 (this image is option software Micro Labo )



PC screen in DS-3N-USB

## ● Standard software

### Viewer and measuring software

Function :

File format : JPEG and BMP

Overlaying of measuring data

Measuring function : Length point to point

Radius, Angle,

Save as calibration data

Character Insertion

Two image comparison

Adjustment : brightness, contrast, white balance

PC circumstances (DS-3UX-II)

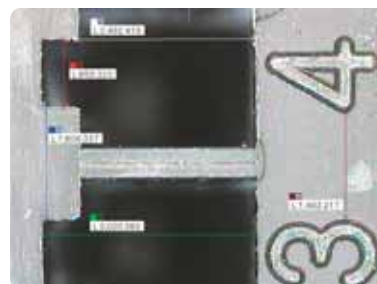
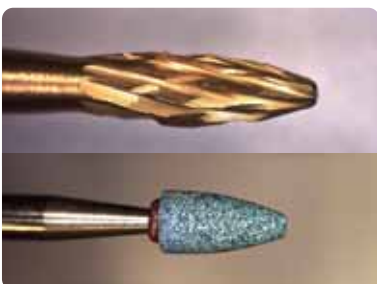
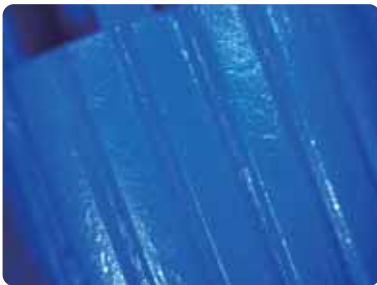
Usable PCs : 100% compatible DOS/V

AT machines with USB2.0 interface

CPU : More than Pentium III 2.8GHz

Memory : more than 512MB

O/S : Windows XP , 2000 SP4

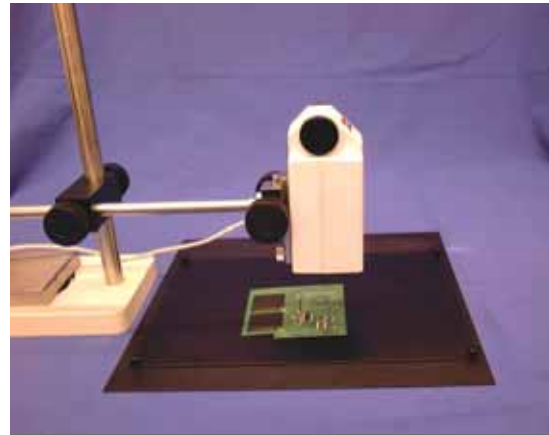


## ● Combination With the Options



**Adjustable Stand**

Take good side view of an object by attaching the magnetized pedestal stand to a solid metal surface.



**Camera Metal Fixture MS-BL-01+  
Black Stage MS-BS-01**

Convenient for observing images that need a wide viewing (up to A4 size). The Stage must be moved manually.



**DS-XYS Stand**

This is a standard stand with an XY Stage.

There are two knobs for moving the XY Stage in the Z direction, one is used for precision movement and the other for rough movement.

It is useful in observing objects when the distance from the microscope to an object is short (high magnification rate).



**DSM Stand 25**

(Measuring Stand)

Ability to display an object up to 1 micron and to measure up to 1/100 mm in the X and Y directions.

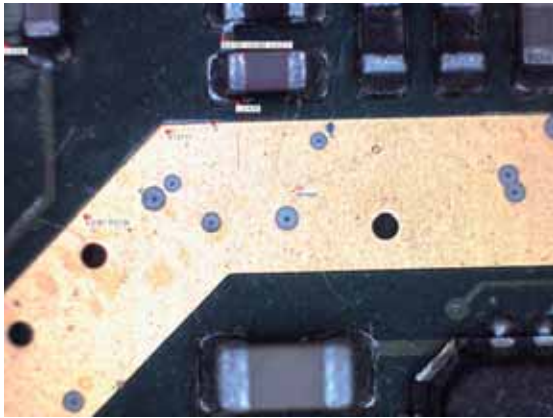
Measurement range:

Up to 25 mm in the X and Y directions

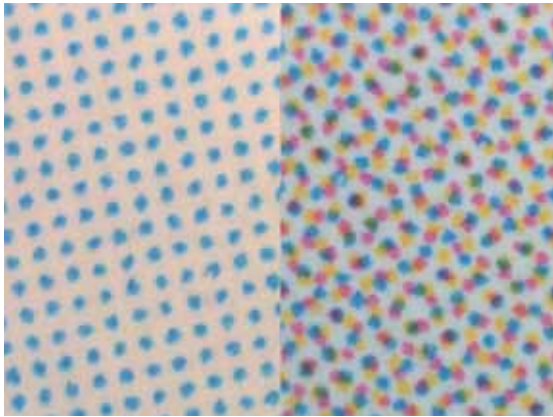
Measurement method:

Align the edge of an object you would like to measure on the cross-line displayed on your PC screen (by software), and set the micrometer head to "0" (zero). Rotate the micrometer head so that the other edge of the object aligns with the cross-line. The displaced value is displayed digitally on the micrometer head.

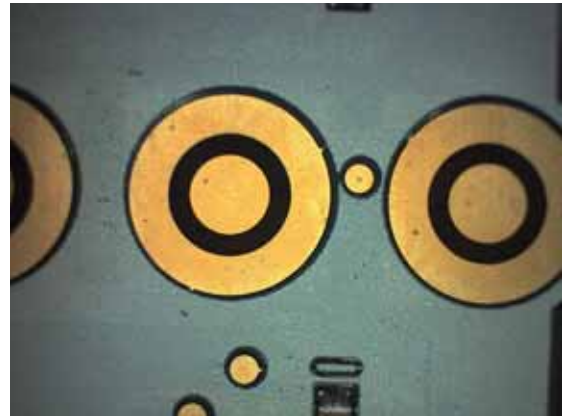
● DS-3UX-II Sample image



Measuring tool sample



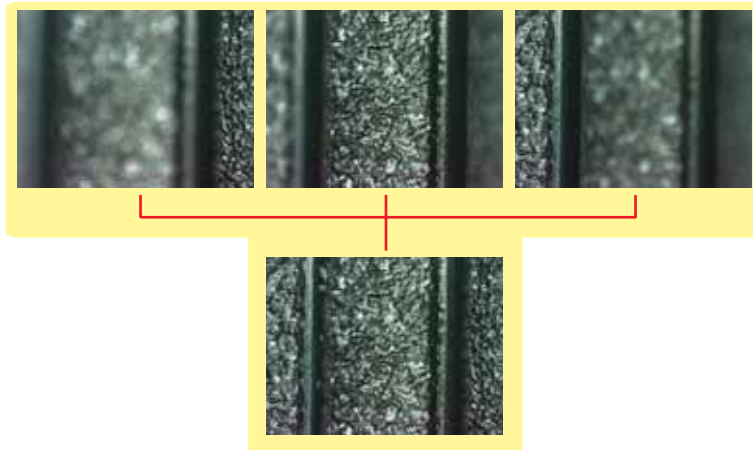
Two image comparison



## ● Option softwear

### Multi focus MicroLab

Generation of wide depth image based on integration of more than three images.



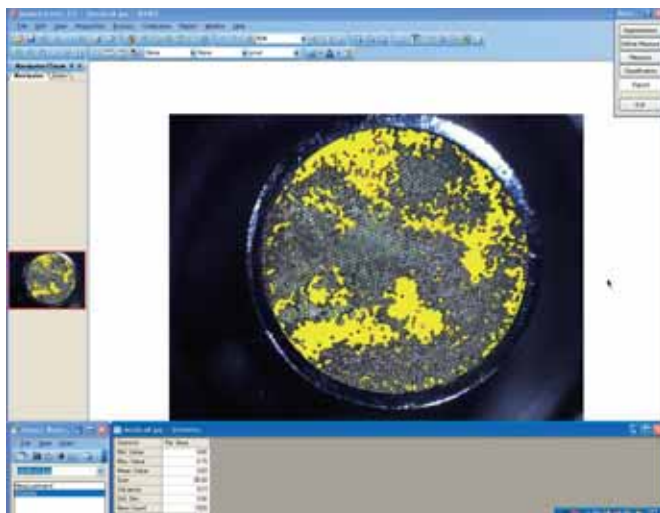
### Function comparison

#### MicroLab / MicroLab LT

Function	MicroLabo	MicroLaboLt
<b>■ Calibration</b>		
Auto Calibration	<input type="radio"/>	<input type="radio"/>
Save as Calibrated Data	<input type="radio"/>	<input type="radio"/>
Multi Focus	<input type="radio"/>	—
Auto Tiling	<input type="radio"/>	—
Save in JPEG/BMP format	<input type="radio"/>	<input type="radio"/>
<b>■ Measurement</b>		
Measurement of LIVE image	<input type="radio"/>	—
Measurement of captured image	<input type="radio"/>	<input type="radio"/>
Measurement of saved images	<input type="radio"/>	<input type="radio"/>
Two-point calibration	<input type="radio"/>	<input type="radio"/>
Horizontal calibration	<input type="radio"/>	<input type="radio"/>
Perpendicular calibration	<input type="radio"/>	<input type="radio"/>
Calibration of any two parallel lines	<input type="radio"/>	—
Perpendicular calibration to any line	<input type="radio"/>	—
Distance between the center point of any two circles	<input type="radio"/>	—
Radius	<input type="radio"/>	<input type="radio"/>
Area of a circle, an ellipse	<input type="radio"/>	<input type="radio"/>
Height, width, and area of a rectangle	<input type="radio"/>	<input type="radio"/>
Area and perimeter of a polygon	<input type="radio"/>	<input type="radio"/>
Angles of a triangle	<input type="radio"/>	<input type="radio"/>
Angle of two lines	<input type="radio"/>	—
Pasting of calibrated data	<input type="radio"/>	<input type="radio"/>

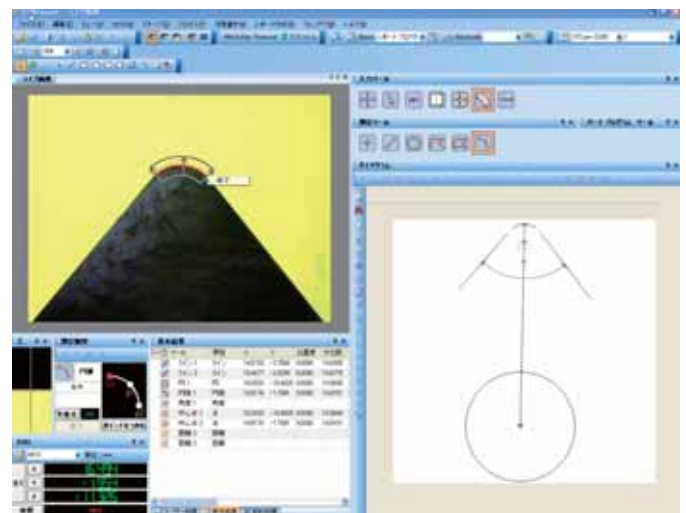
Function	Micro Labo	Micro Labo Lt
<b>■ Notation Tools</b>		
Test Notation (Character Insertion)	<input type="radio"/>	<input type="radio"/>
Line, Rectangle, Circle, Ellipse, Any Line	<input type="radio"/>	<input type="radio"/>
Pasting of Notation Tool	<input type="radio"/>	<input type="radio"/>
<b>■ Image Enhancement</b>		
Reverse, Noise Removal, Brightness, Contrast	<input type="radio"/>	<input type="radio"/>
<b>■ Display</b>		
Grid, Scale	<input type="radio"/>	<input type="radio"/>
<b>■ Report</b>		
Sending of Measured Data to EXCEL	<input type="radio"/>	<input type="radio"/>
Sending to graphic e-mail	<input type="radio"/>	<input type="radio"/>
<b>■ Zoom</b>		
Zoom-in, Zoom-out	<input type="radio"/>	<input type="radio"/>

### Auto count software



Calculate the number and area of the same color or brightness parts.  
This is the sample image of how many percentage of the fiber damaged.

### XTMeasure soft



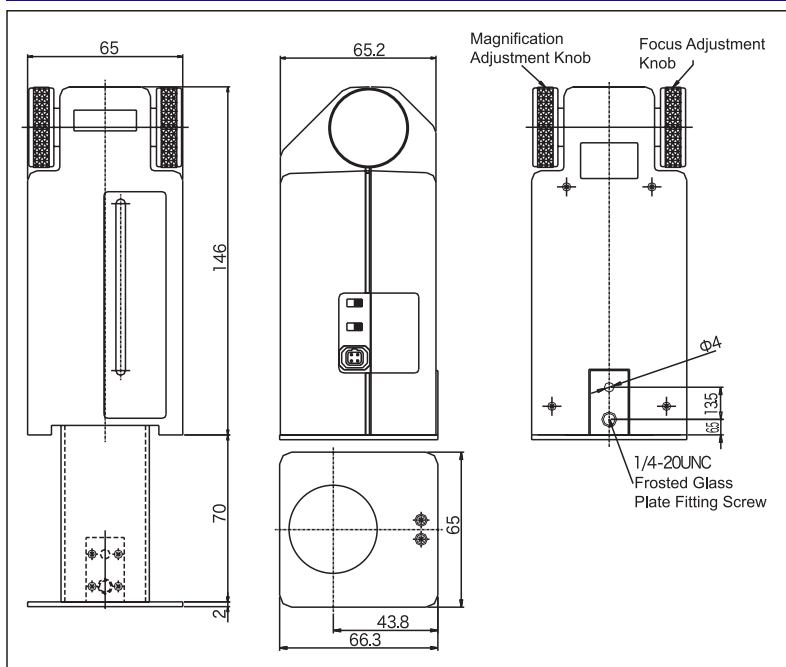
Due to diminish human error, many kinds of auto detect function such as radius, Line, circle are standard.

## ● Magnification Data

Model Name	DS-3N/DS-3N-USB	DS-3NL/DS-3NL-USB	DS-3NSL/DS-3NSL-USB
Interface	TV / PC	TV / PC	TV / PC
Interface (The USB packing is used)	— / USB2.0	— / USB2.0	— / USB2.0
Camera	Color CCD	Color CCD	Color CCD
Resolution	410,000 pixels	410,000 pixels	410,000 pixels
PC Resolution	640 × 480	640 × 480	640 × 480
Magnification	1 × – 450 ×	1 × – 230 ×	1 × – 120 ×
WD=distance in mm to the work			
20 ×	50	110	180
50 ×	20	51	85
100 ×	11	33	49
200 ×	5.5	23	—
300 ×	3.5	—	—
400 ×	2	—	—
Vision range (mm) Focus depth(microns)			
20 ×	10 × 13 (4000)	10 × 13 (4000)	10 × 13 (4000)
50 ×	4 × 5.2 (1500)	4 × 5.2 (1500)	4 × 5.2 (1500)
100 ×	2 × 2.6 (450)	2 × 2.6 (450)	2 × 2.6 (450)
200 ×	1 × 1.3 (200)	1 × 1.3 (200)	—
300 ×	0.67 × 87 (100)	—	—
400 ×	0.4 × 0.55 (50)	—	—

Model Name	DS-3UX - II	DS-3UX L - II
Interface	PC USB2.0	PC USB2.0
Camera	Color CMOS	Color CMOS
Resolution	2000,000 pixels	2000,000 pixels
PC Resolution	1600 × 1200 dots	1600 × 1200 dots
Magnification	1 × – 290 ×	1 × – 150 ×
WD=distance in mm to the work		
Vision range (mm) 10 × 13	26	63
5 × 6.7	—	39
4 × 5.3	14	35
3 × 4	—	30
2.5 × 3.3	—	28
2 × 2.7	9	25
1.5 × 2	7	—
1 × 1.3	6	—

## ● Specifications



● Note: Specifications may change without prior written notice.



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