



HD High Definition 1080p Digital Video Microscope

**FreeScope FSHD4** 2x-100x

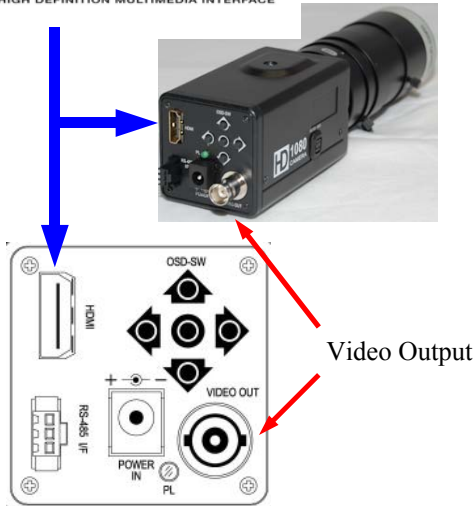
**FSHD8** 4x-200x



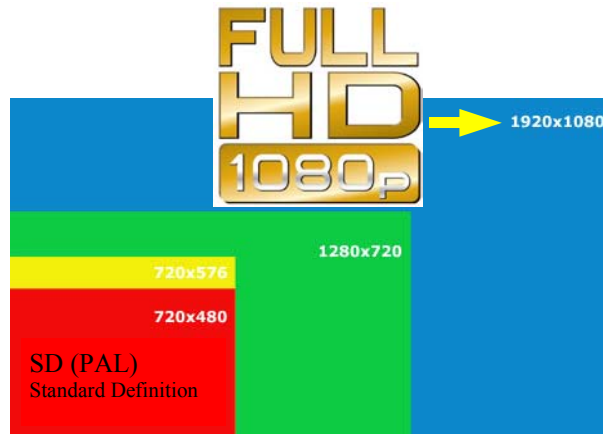
YSC HD FreeScope is the ultimate digital microscope with 22" Samsung HDTV monitor using most advanced high definition digital camera technology delivering full 1080p resolution in HD quality and full motion video with no lag time. The digital microscope is available in different magnification models (2x to 100x and 4x to 200x) with parallel HDMI and video outputs. HD High Definition digital microscope can be configured with various stands, image and video capture devices. Adjustable high intensity LED provides bright uniform lighting for great picture quality. Diffuser lighting can be used to reduce glare from highly reflective parts. Other lighting options are available for this HD digital microscope. Optional laser light pointer is great for locating inspection area. Long working distance (more than 6 inches) digital microscope is ideal for assembly, inspection and training applications. USB capture device can be used to save images and video to your computer. Hardware recording device can also be used to save images and videos to SD card and USB Memory Key. Measurement software and XY measurement stages are also available with HD digital microscope.

**HDMI™**  
HIGH DEFINITION MULTIMEDIA INTERFACE

## HD High Definition is more clear than SD



Video Output



Adjustable High Intensity LEDs with Diffuser Plate

## Stand Options:



Stand with back lighting and XY Measuring Stage



Articulating Arm Extension with Table Clamp



VESA arm for LCD



Stand with back lighting and XY Stage

## Benefits:

- High definition HD 1080p digital microscope for viewing
- Less eye fatigue
- Great Depth of Field
- Healthy Ergonomics
- Less neck stress
- Large 22" LCD for discussion or training purpose
- Full motion HDTV 1080p real time video display
- Save images in jpg, bmp or tiff files for e-mail transmission
- Video Motion can be recorded
- Long working distance (more than 6 inches) for assembly or inspection application
- Wide zoom ratio 10:1 with constant focus
- Full camera, lens and lighting adjustments
- Measurement software and XY measurement stage options
- Stand alone image and video capture device options (NO computer needed)
- Different stand options
- Adjustable viewing angles (0 to 90 degrees)
- Adjustable high intensity LEDs with diffuser plate
- Laser Pointer Option
- Fluorescent or halogen lighting options



## Accessories:



USB Capture Device



Computer



Video Recorder



XY Measurement Stage



Real-Time Multiple Measurement Soft-



XY Stage



Other HD Monitors

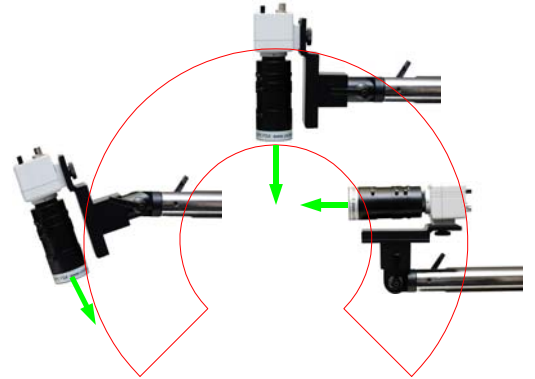


Portable Image and Video Capture Device to SD Card



USB Memory Recorder

## Articulating Head Features:



## Applications:

- Assembly
- Production
- Quality Control
- Failure Analysis
- Process Control
- Measurement
- SMT
- Electronics
- Medical Device
- Machining
- Aerospace
- Natural Science
- Training
- Documentation

Wires



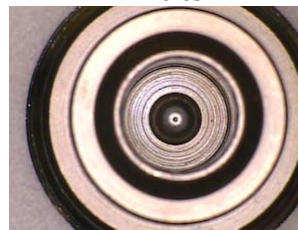
Hooks



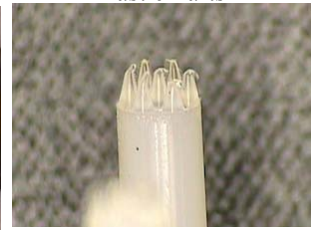
Components



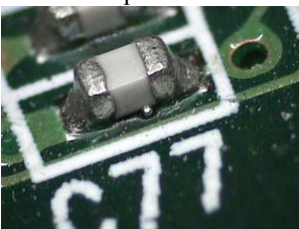
Holes



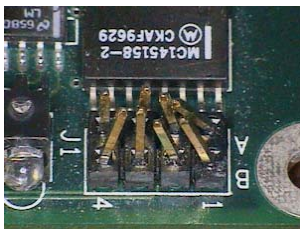
Plastic Parts



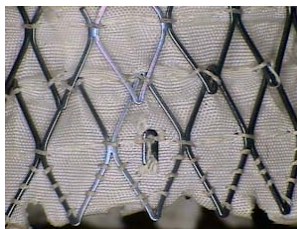
Capacitors



Connectors



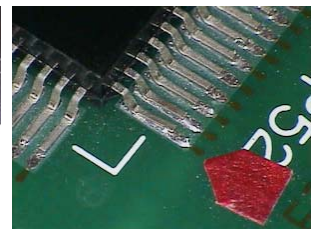
Medical Parts Stent



Mechanical Parts



SMT Surface Mount



## Specifications

|                                       | <b>FSHD4</b>   | <b>FSHD8</b>                         |
|---------------------------------------|--|--------------------------------------|
| <b>Video Magnification (22" LCD)</b>  | <b>2x - 100x</b>   | <b>4x - 200x</b>                     |
| <b>Horizontal Field of View Range</b> | <b>176 to 4.6mm<br/>7.0" to 0.18"</b>  | <b>88 to 2.3mm<br/>3.5" to 0.09"</b> |
| <b>Working Distance Range</b>         | <b>5.3" (135mm) to 16" (406mm)</b>   |                                      |
| <b>Megapixel Sensor</b>               | <b>1/3" CMOS 1384(h) x 1076(v) appr. 1.5 million pixels<br/>1080p @ 30fps or 1080i at 60fps</b>          |                                      |
| <b>Camera Controls</b>                | <b>White Balance, AGC, AES, Auto, Manual</b>   |                                      |
| <b>Lens</b>                           | <b>10x Parfocal Zoom Lens (Manual)</b>   |                                      |
| <b>Lens Adjustments</b>               | <b>Iris, Focus and Zoom</b>  |                                      |
| <b>HDTV LCD Color Monitor</b>         | <b>22 Inch Samsung HDTV monitor Full HD (1920x1080)</b>  |                                      |
| <b>Other LCD Monitor Options</b>      | <b>Please call</b>   |                                      |
| <b>Video Outputs</b>                  | <b>HDMI and Composite</b>  |                                      |
| <b>Viewing Angles</b>                 | <b>Top down straight viewing, 45 degree oblique viewing, 0 to 90 degree</b>                              |                                      |
| <b>Lighting Options</b>               | <b>High Intensity Adjustable LEDs and Diffuser Glass</b>   |                                      |
| <b>Other Lighting Options</b>         | <b>Halogen, Fluorescent and Back Lighting</b>  |                                      |
| <b>Stand Options</b>                  | <b>Basic, Universal, Articulating Arm and Back Lighting Stands</b>                                       |                                      |
| <b>Laser Pointer</b>                  | <b>Optional</b>  |                                      |
| <b>Cross Hair</b>                     | <b>On / Off</b>  |                                      |
| <b>AC adapter input voltage</b>       | <b>100 - 240V (50/60Hz)</b>  |                                      |
| <b>Accessories Available:</b>         | <b>USB Capture Device, Measurement Software, Measurement Stage<br/>and Portable Image Capture Device</b> |                                      |

Specifications subject to changes and E&O without notice and liabilities.

### Magnification/Field of View/Working Distance Chart

|                                      | <b>Working Distance</b> | <b>FSHD4</b>                          | <b>FSHD8</b>                          |
|--------------------------------------|-------------------------|---------------------------------------|---------------------------------------|
| <b>Video Magnification (22" LCD)</b> |                         | <b>10x - 100x</b>                     | <b>20x - 200x</b>                     |
| <b>Horizontal Field of View</b>      | <b>5.3" (135mm)</b>     | <b>46 to 4.6mm<br/>1.8" to 0.18"</b>  | <b>23 to 2.3mm<br/>0.9" to 0.09"</b>  |
| <b>Video Magnification (22" LCD)</b> |                         | <b>6x - 59x</b>                       | <b>12x - 118x</b>                     |
| <b>Horizontal Field of View</b>      | <b>8" (203mm)</b>       | <b>80 to 8.0mm<br/>3" to 0.3"</b>     | <b>40 to 4.0mm<br/>1.5" to 0.15"</b>  |
| <b>Video Magnification (22" LCD)</b> |                         | <b>4.2x - 42x</b>                     | <b>8.4x - 84x</b>                     |
| <b>Horizontal Field of View</b>      | <b>10" (254mm)</b>      | <b>113 to 11.3mm<br/>4.4" to 0.4"</b> | <b>56.5 to 5.7mm<br/>2.2" to 0.2"</b> |
| <b>Video Magnification (22" LCD)</b> |                         | <b>3.7x - 37x</b>                     | <b>7.4x - 74x</b>                     |
| <b>Horizontal Field of View</b>      | <b>12" (305mm)</b>      | <b>130 to 13mm<br/>5.1" to 0.5"</b>   | <b>65 to 6.5mm<br/>2.5" to 0.25"</b>  |
| <b>Video Magnification (22" LCD)</b> |                         | <b>2.7x - 27x</b>                     | <b>5.4x - 54x</b>                     |
| <b>Horizontal Field of View</b>      | <b>16" (406mm)</b>      | <b>176 to 17.6mm<br/>7.0" to 0.7"</b> | <b>88 to 8.8mm<br/>3.5" to 0.35"</b>  |

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Data are best estimated.



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