Brand New 4K HD 8MP color camera provides beautiful 4K high definition images for scientific / industrial applications. Blazing “real time” live speed of 60fps (no on-screen smear or lag) in full 4K (3840x2160 - HDMI) unrivaled color fidelity and on-board image capturing capability. Live on-screen measuring, scaling, editing, and counting.

New 4K HD (3840x2160) 13.3" Retinal Display mounted directly onto the camera with tilting control for optimum viewing angle keeping the footprint of the entire system small. The camera can run, capture and measure all without a computer via simple mouse control.

Or run a simultaneous live image output to a 4K HD retinal display via HDMI and to a computer via USB 3.0 and capture and measure via the included software. Also runs on a WLAN Wireless (Wi-Fi) with the included Wi-Fi wireless adapter or even via a LAN line!!

Images can be saved directly to a PC / Mac / Phone / Tablet, or directly on the camera with the on-board 16GB SD card or USB 3.0 thumb drive.

For a demo contact us at: Microscope Systems, Inc. (800) 674-3714 - http://microscope-systems.com
Your Local Sales / Support person is Kurt Neumann - Cell phone (919) 906-7943 - email Kurt@microscope-systems.com
4K HD Camera is perfect used in the field of medical microscope imaging, industrial measuring / detection and machine vision. It provides functions to fully control the camera and present the video stream processed by sophisticated color engine at high speed.

Diversified useful tools are provided for specific applications.

- Image stitching - Live / Still
- Extended Depth of Field - Live / Still
- High Dynamic Range (HDR)
- Color Composition for fluorescence application
- Cell Counting: Manual and automatic cell counting
- Comprehensive measurements: Angles (3 or 4 points), Point, Lines (arbitrary/horizontal/vertical), Parallel lines, Rectangles, Ellipse, Circles, Annulus, Two circle, Arc, Text, Polygons, Curves
- Video Overlay
- Digital Binning
- Flat Field / Dark Field Correction
- Sophisticated Image Processing functions

Multi-language mechanism to support random language, which includes but not limited to English, French, German, Indonesian, Japanese, Polish, Russian, Chinese, Turkish, and more. Currently supports 16 languages.

Comprehensive SDK for different platform(s) can be provided for professional software developers, including Windows, Mac, and Linux (including x86 and ARM architecture). Twain and DirectShow drivers available.

Sample Image: Taste Bud
What comes in the box

- 4K HD Digital Camera Body
- Power Adaptor: Input: AC 100~240V 50Hz/60Hz, Output: DC 12V 1A
- USB Mouse
- HDMI 2.0 Cable
- High-speed USB3.0 A male to A male gold-plated connectors cable /2.0m
- CD Imaging Software (Driver & utilities software)
- SD Card (16G or above; Speed: Class 10)
- USB WLAN adapter
- 13.3” 4K HD Retinal Display / Tilt Mounting Adapter / Y Power Cable—Splitter / Tool
## MS60HD Datasheet

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Sensor &amp; Size(mm)</th>
<th>Pixel(μm)</th>
<th>G Sensitivity Dark Signal</th>
<th>FPS/Resolution</th>
<th>Binning</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS60HD</td>
<td>4K/Sony IMX485(C)</td>
<td>2.9x2.9</td>
<td>2188mv with 1/30s</td>
<td>60@3840<em>2160(HDMI, USB3) 60@1920</em>1080(HDMI) 30@3840*2160(WiFi, LAN)</td>
<td>1x1</td>
<td>0.04ms~2000ms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>USB Mode</th>
<th>Sensor Output</th>
<th>FPS/Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS60HD</td>
<td>device</td>
<td>30fps/3840*2160</td>
<td>30fps/3840<em>2160 (HDMI/LAN/USB) 30fps/3840</em>2160 (mp4 video record) 3840*2160 (Image Capture)</td>
</tr>
<tr>
<td>MS60HD</td>
<td>host</td>
<td>60fps/3840*2160</td>
<td>60fps/3840<em>2160 (HDMI &amp; USB3) 30fps/3840</em>2160 (LAN/WLAN) 60fps/3840<em>2160 (mp4 video record) 3840</em>2160 (Image Capture)</td>
</tr>
</tbody>
</table>

### MS60HD Features

- **Sensor**: Sony IMX485 CMOS
- **Sensor Size**: 1/1.2” (11.14×6.26)
- **Pixel(μm)**: 2.9×2.9
- **Preview Resolution**: 8MPixel (HDMI / LAN / USB)
- **Capture Resolution**: 8MPixel
- **Frame Rate**: 60fps@3840×2160(HDMI & USB3); 30fps@3840×2160(network); 30fps@3840×2160(USB2)
- **G Sensitivity**: 2188mv with 1/30s
- **Dark Signal**: 0.39mv with 1/30s
- **Capture**: SD card; USB flash driver
- **Exposure Mode**: Auto/Manual
- **Exposure Time**: 0.04ms~2000ms
- **White Balance**: Auto/Manual
- **Setting**: exposure, gain, white balance, color adjustment, sharpness, 3D denoising
- **Built-in Software**: XCamView
- **PC Software**: ImageView
- **Data Interface**: HDMI, USB3.0, Wifi, LAN, SD card
- **Optical Port**: Standard C-Mount
- **Camera Size**: 88.00×65.00×78.00(mm)
- **Camera Weight**: About 1.00KG
- **Camera Housing**: CNC Precision Machining Shell

(800) 674-3714 - http://microscope-systems.com
4K 13.3” Monitor
Frame Rate / Resolution: 60fps / 3840*2160 (HDMI)