



Aven's Complete Product Line : Microscopy and Inspection : Digital Microscopes : Cyclops Digital Microscope

## Cyclops Digital Microscope • Product # 26700-400



Rating: ★★★★★

**Product # :** 26700-400

**Overview :** Cyclops digital microscope with built in HDMI and USB outputs. 15x-270x magnification in HDMI mode on a 21.5" HD monitor and maximum of 534x magnification in USB mode. 4x (included) and 10x (optional) interchangeable objective lenses. 30 LEDs with brightness control provides illumination to meet a variety of application needs. Heavy duty metal stand, remote and cables included. Unit comes standard with 4x objective lens.



Description Features **Specs** Video

### Cyclops Digital Microscope

<b>Image Sensor</b>	1/4" Color CMOS
<b>Effective Pixels</b>	5M
<b>Signal Output</b>	HDMI and USB
<b>Video Format</b>	AVI
<b>Frames Per Second</b>	30fps
<b>Magnification</b>	See Magnification Tables
<b>Gain Control</b>	Automatic
<b>Snap Shot Mode</b>	Hardware & Software controls
<b>White Balance</b>	Manual and Automatic
<b>Power Source</b>	DC 5V/2A input; Cable length 180cm
<b>O/S</b>	Windows 7 & 8

<b>Power Consumption</b>	110mA (AVG)
<b>LED Lighting</b>	30 White LEDs with brightness & sector control
<b>Dimensions</b>	106 x 152mm
<b>Weight</b>	0.70lb   310g
<b>Package Contents</b>	Cyclops Digital Microscope 4x Objective lens HDMI cable   USB 2.0 cable Power adaptor   Metal stand White balance card   Calibration scale Software CD   IR remote

Magnification Tables

**Object Lens 4x on 21.5" screen**  
*(this data is only for reference)*

Sensor Position	1	2	3	4	5	6	7	8
<b>Distance (cm)</b>	21.8	18.1	11.1	8.02	6.37	5.25	4.46	3.91
<b>F,S FOV (mm)</b>	26.2	21.9	13.3	9.52	7.49	6.15	5.18	4.52
<b>C FOV (mm)</b>	19.4	16.2	9.80	7.04	5.54	4.55	3.83	3.34
<b>F Magnification (X)</b>	13	16	27	37	47	58	69	79
<b>S Magnification (X)</b>	17	21	35	49	62	77	91	105
<b>C Magnification (X)</b>	23	28	48	66	84	104	124	142

Sensor Position	9	10	11	12	13	14	15
<b>Distance (cm)</b>	3.49	3.13	2.85	2.62	2.44	2.26	2.13
<b>F,S FOV (mm)</b>	3.99	3.56	3.22	2.94	2.71	2.50	2.34
<b>C FOV (mm)</b>	2.95	2.63	2.38	2.18	2.01	1.85	1.73
<b>F Magnification (X)</b>	89	100	111	121	132	143	152
<b>S Magnification (X)</b>	118	133	147	161	175	190	202
<b>C Magnification (X)</b>	160	180	199	217	237	257	273

**Object Lens 10x on 21.5" screen**  
*(this data is only for reference)*

Sensor Position	1	2	3	4	5	6	7	8
<b>Distance (mm)</b>	9.85	9.35	9.00	8.65	8.35	8.10	7.88	7.66
<b>F,S FOV (mm)</b>	1.41	1.31	1.22	1.14	1.07	1.01	0.96	0.91
<b>C FOV (mm)</b>	1.04	0.97	0.90	0.84	0.79	0.75	0.71	0.67
<b>F Magnification (X)</b>	253	273	293	313	334	354	372	393
<b>S Magnification (X)</b>	337	363	390	417	445	471	495	523
<b>C Magnification (X)</b>	455	491	527	563	601	637	669	707

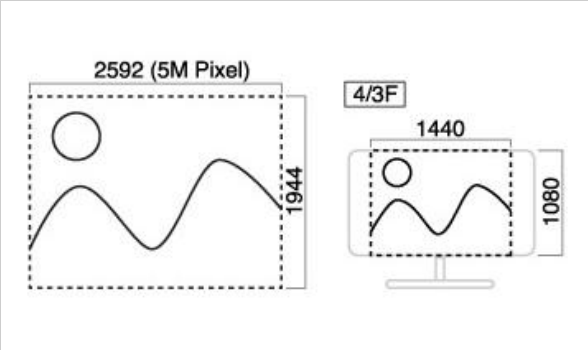
  

Sensor Position	9	10	11	12	13	14	15
<b>Distance (mm)</b>	7.46	7.28	7.10	6.96	6.84	6.74	6.64
<b>F,S FOV (mm)</b>	0.87	0.83	0.79	0.76	0.73	0.70	0.67
<b>C FOV (mm)</b>	0.64	0.61	0.58	0.56	0.54	0.52	0.50

<b>F Magnification (X)</b>	411	431	452	470	490	511	534	
<b>S Magnification (X)</b>	547	574	602	626	653	681	711	
<b>C Magnification (X)</b>	739	775	813	846	882	919	961	

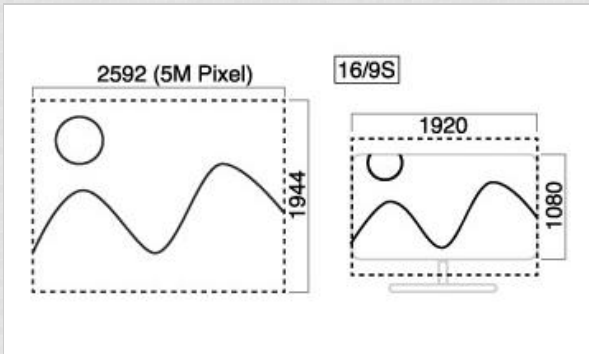
Video Ratio

- o **4/3F:** Formats the image to fit a 4:3 screen size (1440\*1080) by proportionally reducing the input image to fit the screen.



- o **16/9S:** Formats the image to fit a 16:9 screen size (1920\*1080) by scaling the input image width and trimming the height to fit the screen. The magnification

will also increase.



- o **16/9C:** Formats the image to fit a 16:9 screen size (1920\*1080) by cropping the input image (1920\*1080) from input image 5M (2595\*1944). The FOV

becomes smaller and magnification becomes higher.

