

# NewView 7000 Objective Chart

Specifications with Standard High Speed Camera (640 x 480 pixels)

Magnification	Standard (STD)						Long Working Distance (LWD)					Glass Compensated (GC)			Super Long Working Distance			
	2.5X	5X	10X	20X	50X	100X	1X	1X	2X	5X	10X	2X	5X	10X	1X	2.5X	5X	
Design	Michelson	Michelson	Mirau	Mirau	Mirau	Mirau	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson
NA	0.075	0.13	0.30	0.40	0.55	0.85	0.03	0.03	0.055	0.14	0.28	0.055	0.14	0.28	0.03	0.075	0.12	
Working Dist (mm)	10.3	9.3	7.4	4.7	3.4	0.5	8.3	8.3	20.5	20.5	18.8	18.5	19.0	18.0	40.0	40.0	40.0	
Optical Res (µm)	3.80	2.19	0.95	0.71	0.52	0.34	9.50	9.50	5.18	2.04	1.02	5.18	2.04	1.02	9.50	3.80	2.38	
Slope Limit (deg)	3.71	7.41	14.53	21.80	28.81	38.66	1.49	1.49	2.98	7.41	14.53	2.98	7.41	14.53	1.49	3.71	7.41	
Parfocal Dist (mm)	80.1	56.5	56.5	56.5	56.5	56.5	122.8	122.8	101.0	101.0	125.1	120.0	120.0	120.0	181.5	139.0	111.7	
Turret Mountable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No	No	
NewView 7000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
NewView 700	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓				

  

Field of View based on Field Zoom Lens (mm x mm)																		
0.5X	5.65 x 4.24	2.83 x 2.12	1.41 x 1.06	0.71 x 0.53	0.28 x 0.21	0.14 x 0.11	14.14x10.6	14.14x10.6	7.04 x 5.30	2.83 x 2.12	1.41 x 1.06	7.04 x 5.30	2.83 x 2.12	1.41 x 1.06	14.14x10.6	5.65 x 4.24	2.83 x 2.12	
0.75X	3.75 x 2.81	1.88 x 1.41	0.94 x 0.70	0.47 x 0.35	0.19 x 0.14	0.09 x 0.07	9.38 x 7.03	9.38 x 7.03	4.69 x 3.52	1.88 x 1.41	0.94 x 0.70	4.69 x 3.52	1.88 x 1.41	0.94 x 0.70	9.38 x 7.03	3.75 x 2.81	1.88 x 1.41	
1.0X	2.81 x 2.10	1.41 x 1.05	0.70 x 0.53	0.35 x 0.26	0.14 x 0.11	0.07 x 0.05	7.02 x 5.26	7.02 x 5.26	3.52 x 2.64	1.41 x 1.05	0.70 x 0.53	3.52 x 2.64	1.41 x 1.06	0.70 x 0.53	7.02 x 5.26	2.81 x 2.10	1.41 x 1.05	
1.5X	1.88 x 1.41	0.94 x 0.70	0.47 x 0.35	0.23 x 0.18	0.09 x 0.07	0.05 x 0.04	4.69 x 3.52	4.69 x 3.52	2.35 x 1.76	0.94 x 0.70	0.47 x 0.35	2.35 x 1.76	0.94 x 0.70	0.47 x 0.35	4.69 x 3.52	1.88 x 1.41	0.94 x 0.70	
2.0X	1.41 x 1.06	0.71 x 0.53	0.35 x 0.27	0.18 x 0.13	0.07 x 0.05	0.04 x 0.03	3.53 x 2.65	3.53 x 2.65	1.77 x 1.33	0.71 x 0.53	0.35 x 0.27	1.77 x 1.33	0.71 x 0.53	0.35 x 0.27	3.53 x 2.65	1.41 x 1.06	0.71 x 0.53	

  

Spatial Sampling based on Field Zoom Lens (µm)																		
0.5X	8.84	4.42	2.21	1.10	0.44	0.22	22.09	22.09	11.05	4.42	2.21	11.05	4.42	2.21	22.09	8.84	4.42	
0.75X	5.86	2.93	1.47	0.73	0.29	0.15	14.65	14.65	7.33	2.93	1.47	7.33	2.93	1.47	14.65	5.86	2.93	
1.0X	4.39	2.19	1.10	0.55	0.22	0.11	10.96	10.96	5.48	2.19	1.10	5.48	2.19	1.10	10.96	4.39	2.19	
1.5X	2.93	1.47	0.73	0.37	0.15	0.07	7.33	7.33	3.67	1.47	0.73	3.67	1.47	0.73	7.33	2.93	1.47	
2.0X	2.21	1.10	0.55	0.28	0.11	0.06	5.52	5.52	2.76	1.10	0.55	2.76	1.10	0.55	5.52	2.21	1.10	

  

ZYGO P/N	6300-0592-01	6300-0593-01	6300-0194-01	6300-0595-01	6300-0597-01	6401-0102-01	6300-0316-01	6300-0318-01	6300-0245-01	6300-0249-01	6300-0263-01	6401-0115-01	6401-0112-01	6401-0106-01	6300-0307-01	6300-0320-01	6300-0325-01
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Notes: Field Zoom Lens applicable for NewView 7200 and 7300, NewView 7100 is configured as 0.75X, NewView 700 is configured as 1.0X.  
 Optical Resolution is based on Sparrow Criteria  $=0.5\lambda/NA$ , where  $\lambda=570$  nm.  
 Slope Limit in degrees based on 1X field zoom lens.  
 Parfocal Dist is the distance from the objective shoulder to objective focal plane; objectives with same distance can be interchanged with little or no refocusing.  
 Spatial Sampling is the pixel size on the sample. It is derived from the camera pixel size divided by the system magnification.  
 Specifications subject to change without prior notice.



# NewView 7000 Objective Chart

## Specifications with Large Array Camera (992 x 992 pixels)

Magnification	Standard (STD)						Long Working Distance (LWD)					Glass Compensated (GC)			Super Long Working Distance			
	2.5X	5X	10X	20X	50X	100X	1X	1X	2X	5X	10X	2X	5X	10X	1X	2.5X	5X	
Design	Michelson	Michelson	Mirau	Mirau	Mirau	Mirau	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson	Michelson
NA	0.075	0.13	0.30	0.40	0.55	0.85	0.03	0.03	0.055	0.14	0.28	0.055	0.14	0.28	0.03	0.075	0.12	
Working Dist (mm)	10.3	9.3	7.4	4.7	3.4	0.5	8.3	8.3	20.5	20.5	18.8	18.5	19.0	18.0	40.0	40.0	40.0	
Optical Res (µm)	3.80	2.19	0.95	0.71	0.52	0.34	9.50	9.50	5.18	2.04	1.02	5.18	2.04	1.02	9.50	3.80	2.38	
Slope Limit (deg)	3.71	7.41	14.53	21.80	28.81	38.66	1.49	1.49	2.98	7.41	14.53	2.98	7.41	14.53	1.49	3.71	7.41	
Parfocal Dist (mm)	80.1	56.5	56.5	56.5	56.5	56.5	122.8	122.8	101.0	101.0	125.1	120.0	120.0	120.0	181.5	139.0	111.7	
Turret Mountable	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No	No	
<b>Field of View based on Field Zoom Lens (square mm)</b>																		
0.5X	Ø8.77	Ø4.38	Ø2.19	Ø1.10	Ø0.44	Ø0.22	Ø21.91	Ø21.91	Ø10.96	Ø4.38	Ø2.19	Ø10.96	Ø4.38	Ø2.19	Ø21.91	Ø8.77	Ø4.38	
0.75X	5.81	2.91	1.45	0.73	0.29	0.15	14.54	14.54	7.27	2.91	1.45	7.27	2.91	1.45	14.54	5.81	2.91	
1.0X	4.35	2.18	1.09	0.54	0.22	0.11	10.88	10.88	5.44	2.18	1.09	5.44	2.18	1.09	10.88	4.35	2.18	
1.5X	2.91	1.45	0.73	0.29	0.15	0.07	7.27	7.27	3.64	1.45	0.73	3.64	1.45	0.73	7.27	2.91	1.45	
2.0X	2.19	1.10	0.55	0.27	0.11	0.05	5.48	5.48	2.74	1.10	0.55	2.74	1.10	0.55	5.48	2.19	1.10	
<b>Spatial Sampling based on Field Zoom Lens (µm)</b>																		
0.5X	8.84	4.42	2.21	1.10	0.44	0.22	22.09	22.09	11.45	4.42	2.21	11.45	4.42	2.21	22.09	8.84	4.42	
0.75X	5.86	2.93	1.47	0.73	0.29	0.15	14.65	14.65	7.34	2.93	1.47	7.34	2.93	1.47	14.65	5.86	2.93	
1.0X	4.39	2.19	1.10	0.55	0.22	0.11	10.96	10.96	5.48	2.19	1.10	5.48	2.19	1.10	10.96	4.39	2.19	
1.5X	2.93	1.47	0.73	0.37	0.15	0.07	7.33	7.33	3.67	1.47	0.73	3.67	1.47	0.73	7.33	2.93	1.47	
2.0X	2.21	1.10	0.55	0.28	0.11	0.06	5.52	5.52	2.76	1.10	0.55	2.76	1.10	0.55	5.52	2.21	1.10	
ZYGO P/N	6300-0592-01	6300-0593-01	6300-0194-01	6300-0595-01	6300-0597-01	6401-0102-01	6300-0316-01	6300-0318-01	6300-0245-01	6300-0249-01	6300-0263-01	6401-0115-01	6401-0112-01	6401-0106-01	6300-0307-01	6300-0320-01	6300-0325-01	

Notes: Field Zoom Lens applicable for NewView 7200 and 7300, NewView 7100 is configured as 0.75X, NewView 700 is configured as 1.0X  
 Optical Resolution is based on Sparrow Criteria  $=0.5\lambda/NA$ , where  $\lambda=570$  nm.  
 Slope Limit in degrees based on 1X field zoom lens.  
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 Spatial Sampling is the pixel size on the sample. It is derived from the camera pixel size divided by the system magnification.  
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