



PMS-K75C-C

The 4K big FOV high-resolution zoom lens not only has excellent performance in zooming, but also has big FOV and higher speed; it's an ideal choice for high speed detection and accurate application. Compared with the traditional zoom system, the field of vision is improved by more than 1.45×

4K Zoom Lens Parameter							
Magnification Range		0.68×~5.0×					
Working Distance(mm)		80					
Magnification		0.68×	1.0×	2.0×	3.0×	4.0×	5.0×
DOF(mm)		1.78	0.89	0.25	0.12	0.08	0.07
N.A.		0.033	0.045	0.08	0.11	0.12	0.12
F.No.		10.3	11.0	12.4	13.5	16.5	20.6
Resolution(μm)		10.17	7.46	4.19	3.05	2.8	2.8
TV Distortion		<0.02%	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%
FOV(mm)	1"	23.53×18.82×14.12	16.0×12.8×9.6	8.0×6.4×4.8	5.33×4.27×3.2	4.0×3.2×2.4	3.2×2.56×1.92
	2/3"	16.18×12.94×9.71	11.0×8.8×6.6	5.5×4.4×3.3	3.67×2.93×2.2	2.75×2.2×1.65	2.2×1.76×1.32
	1/2"	11.76×9.41×7.06	8.0×6.4×4.8	4.0×3.2×2.4	2.67×2.13×1.6	2.0×1.6×1.2	1.6×1.28×0.96
	1/3"	8.82×7.06×5.29	6.0×4.8×3.6	3.0×2.4×1.8	2.0×1.6×1.2	1.5×1.2×0.9	1.2×0.96×0.72
Max. Sensor Size		1"					
Total Length(mm)		328					
Zooming Method		Manual/Motorized					
Mount		C-Mount					

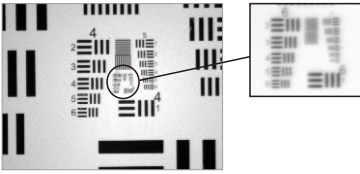
PRODUCT ADVANTAGES

- Support 1"sensor camera, which expands the FOV by more than 1.45× compared with the traditional lens at the same magnification.
- Designed with higher resolution requirements, the horizontal resolution with a 1 inch camera can reach 4K level.
- The magnification is 0.68× -5×, which is suitable for most testing applications.
- Modular design, multiple magnification TV tube and lens attachment are optional, modules with other functions are additionally provided for selection.

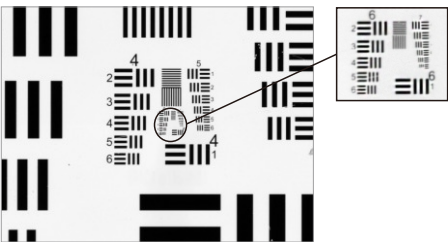
APPLICATION FIELDS

Widely used in biology, electronics, semiconductor, machine vision and other high-precision industries.

ACTUAL IMAGE



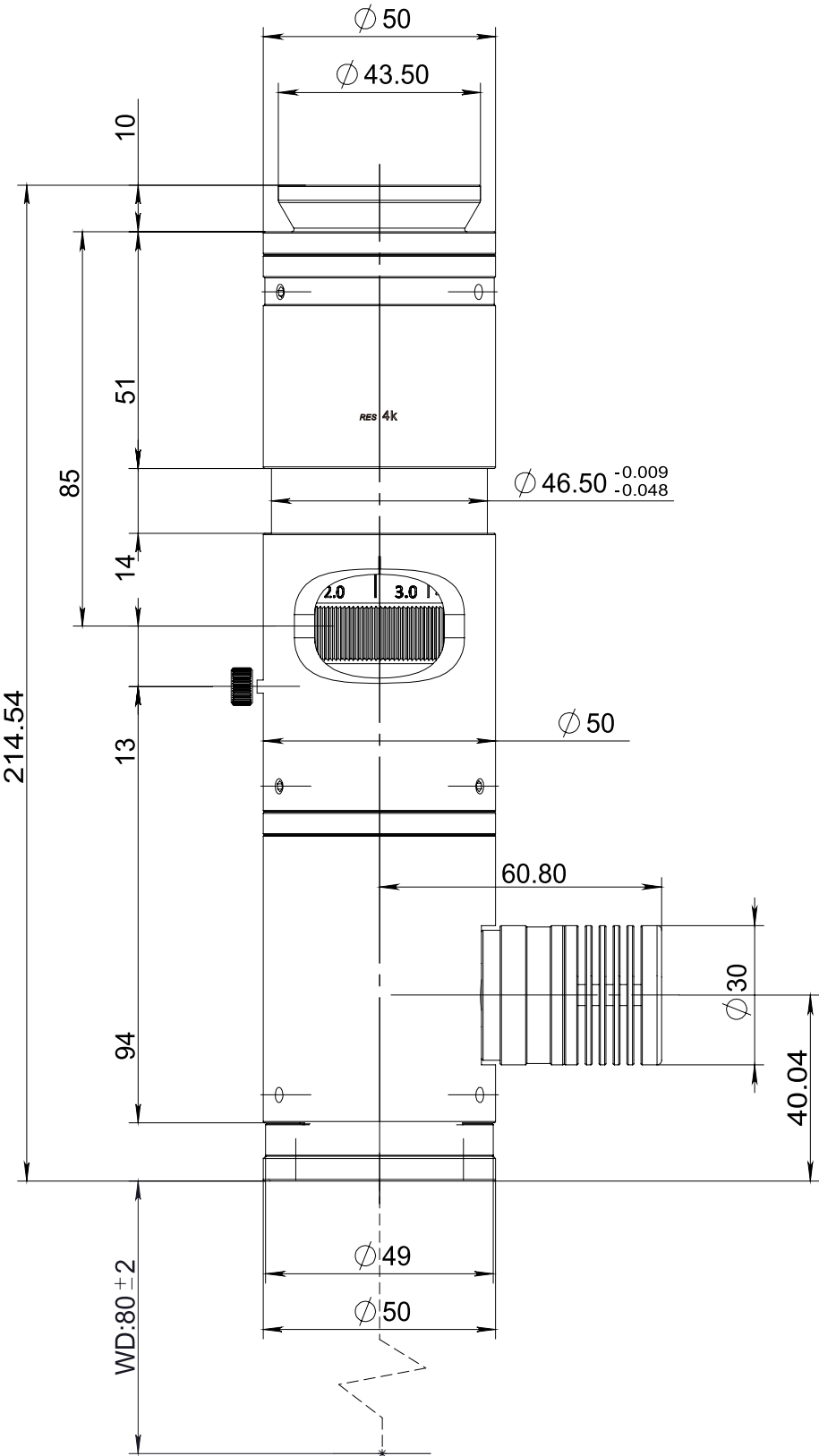
Ordinary zoom lens 5× resolution board



4K high resolution zoom lens 5X resolution board

Dimension Drawing

Unit:mm



4K Zoom Lens FOV Table															
Lens Attachment	WD(mm)	N.A.		Object Resolution(μm)		Tube Mag.	0.7X		1X		1.5X		2X		
		Low Magnification	High Magnification	Low Magnification	High Magnification		Low Magnification	High Magnification	Low Magnification	High Magnification	Low Magnification	High Magnification	Low Magnification	High Magnification	
0.25X	240	0.0083	0.03	40.67	11.18										
						Magnification	0.119X	0.857X	0.17X	1.25X	0.255X	1.875X	0.34X	2.5X	
						Depth of field (mm)	40.74	1.52	28.52	1.07	19.01	0.71	14.26	0.53	
						CameraSensor(D×H×V)(mm)	1/2"	67.2×53.8×40.3	9.1×7.3×5.5	47.1×37.6×28.2	6.4×5.1×3.8	31.4×25.1×18.8	4.3×3.4×2.6	23.5×18.8×14.1	3.2×2.6×1.9
							2/3"	92.4×73.9×55.5	12.6×10.1×7.5	64.7×51.8×38.8	8.8×7.0×5.3	43.1×34.5×25.9	5.9×4.7×3.5	32.4×25.9×19.4	4.4×3.5×2.6
							1"	-	-	94.1×75.3×56.5	12.8×10.2×7.7	62.7×50.2×37.6	8.5×6.8×5.1	47.1×37.6×28.8	6.4×5.1×3.8
							4/3"	-	-	-	-	84.7×67.8×50.8	11.5×9.2×6.9	63.5×50.8×38.1	8.6×6.9×5.2
32mm	-	-	-	-	-	-	94.1×75.3×56.5	12.8×10.2×7.7							
0.5X	135	0.0165	0.06	20.33	5.59										
						Magnification	0.238X	1.75X	0.34X	2.5X	0.51X	3.75X	0.68X	5X	
						Depth of field (mm)	10.19	0.38	7.13	0.27	4.75	0.18	3.57	0.13	
						CameraSensor(D×H×V)(mm)	1/2"	33.6×26.9×20.2	4.6×3.7×2.7	23.5×18.8×14.1	3.2×2.6×1.9	15.7×12.5×9.4	2.1×1.7×1.3	11.8×9.4×7.1	1.6×1.3×1.0
							2/3"	46.2×37.0×27.7	6.3×5.0×3.8	32.4×25.9×19.4	4.4×3.5×2.6	21.6×17.3×12.9	2.9×2.3×1.8	16.2×12.9×9.7	2.2×1.8×1.3
							1"	-	-	47.1×37.6×28.2	6.4×3.5×2.6	31.4×25.1×18.8	4.3×3.4×2.6	23.5×18.8×14.1	3.2×2.6×1.9
							4/3"	-	-	-	-	42.4×33.9×24.4	5.8×4.6×3.5	31.8×25.4×19.1	4.3×3.5×2.6
32mm	-	-	-	-	-	-	47.1×37.6×28.2	6.4×5.1×3.8							
0.75X	111	0.025	0.09	13.56	3.73										
						Magnification	0.375X	2.625X	0.51X	3.75X	0.765X	5.625X	1.02X	7.5X	
						Depth of field (mm)	4.53	0.17	3.17	0.12	2.11	0.08	1.58	0.06	
						CameraSensor(D×H×V)(mm)	1/2"	22.4×17.9×13.4	3.0×2.4×1.8	15.7×12.5×9.4	2.1×1.7×1.3	10.5×8.4×6.3	1.4×1.1×0.9	7.8×6.3×4.7	1.1×0.9×0.6
							2/3"	30.8×24.6×18.5	4.2×3.4×2.5	21.6×17.3×12.9	2.9×2.3×1.8	14.4×11.5×8.6	2.0×1.6×1.2	10.8×8.6×6.5	1.5×1.2×0.9
							1"	-	-	31.4×25.1×18.8	4.3×3.4×2.6	20.9×16.7×12.5	2.8×2.3×1.7	15.7×12.5×9.4	2.1×1.7×1.3
							4/3"	-	-	-	-	28.2×22.6×16.9	3.8×3.1×2.3	21.2×16.9×12.7	2.9×2.3×1.7
32mm	-	-	-	-	-	-	31.4×25.1×18.8	4.3×3.4×2.6							
1X	80	0.033	0.12	10.17	2.80										
						Magnification	0.476X	3.5X	0.68X	5X	1.02X	7.5X	1.36X	10X	
						Depth of field (mm)	2.55	0.10	1.78	0.07	1.19	0.04	0.89	0.03	
						CameraSensor(D×H×V)(mm)	1/2"	16.8×13.4×10.1	2.3×1.8×1.4	11.8×9.4×7.1	1.6×1.3×1.0	7.8×6.3×4.7	1.1×0.9×0.6	5.9×4.7×3.5	0.8×0.6×0.5
							2/3"	23.1×18.5×13.9	3.1×2.5×1.9	16.2×12.9×9.7	2.2×1.8×1.3	10.8×8.6×6.5	1.5×1.2×0.9	8.1×6.5×4.9	1.1×0.9×0.7
							1"	-	-	23.5×18.8×14.1	3.2×2.6×1.9	15.7×12.5×9.4	2.1×1.7×1.3	11.8×9.4×7.1	1.6×1.3×1.0
							4/3"	-	-	-	-	21.2×16.9×12.7	2.9×2.3×1.7	15.9×12.7×9.5	2.2×1.7×1.3
32mm	-	-	-	-	-	-	23.5×18.8×14.1	3.2×2.6×1.9							
1.5X	45	0.0495	0.18	6.78	1.86										
						Magnification	0.714X	5.25X	1.02X	7.5X	1.53X	11.25X	2.04X	15X	
						Depth of field (mm)	1.13	0.04	0.79	0.03	0.53	0.02	0.40	0.01	
						CameraSensor(D×H×V)(mm)	1/2"	11.2×9.0×6.7	1.5×1.2×0.9	7.8×6.3×4.7	1.1×0.9×0.6	5.2×4.2×3.1	0.7×0.6×0.4	3.9×3.1×2.4	0.5×0.4×0.3
							2/3"	15.4×12.3×9.2	2.1×1.7×1.3	10.8×8.6×6.5	1.5×1.2×0.9	7.2×5.8×4.3	1.0×0.8×0.6	5.4×4.3×3.2	0.7×0.6×0.4
							1"	-	-	15.7×12.5×9.4	2.1×1.7×1.3	10.5×8.4×6.3	1.4×1.1×0.9	7.8×6.3×4.7	1.1×0.9×0.6
							4/3"	-	-	-	-	14.1×11.3×8.5	1.9×1.5×1.2	10.6×8.5×6.4	1.4×1.2×0.9
32mm	-	-	-	-	-	-	15.7×12.5×9.4	2.1×1.7×1.3							
2X	27	0.066	0.24	5.08	1.40										
						Magnification	0.952X	7X	1.36X	10X	2.04X	15X	2.72X	20X	
						Depth of field (mm)	0.64	0.02	0.45	0.02	0.30	0.01	0.22	0.01	
						CameraSensor(D×H×V)(mm)	1/2"	8.4×6.7×5.0	1.1×0.9×0.7	5.9×4.7×3.5	0.8×0.6×0.5	3.9×3.1×2.4	0.5×0.4×0.3	2.9×2.4×1.8	0.4×0.3×0.2
							2/3"	11.6×9.2×6.9	1.6×1.3×0.9	8.1×6.5×4.9	1.1×0.9×0.7	5.4×4.3×3.2	0.7×0.6×0.4	4.0×3.2×2.4	0.6×0.4×0.3
							1"	-	-	11.8×9.4×7.1	1.6×1.3×1.0	7.8×6.3×4.7	1.1×0.9×0.6	5.9×4.7×3.5	0.8×0.6×0.5
							4/3"	-	-	-	-	10.6×8.5×6.4	1.4×1.2×0.9	7.9×6.4×4.8	1.1×0.9×0.6
32mm	-	-	-	-	-	-	11.8×9.4×7.1	1.6×1.3×1.0							

