

HD809 Spec Chart

Lens Objective	Working Distance (mm)	Working Distance (inch)		L009-R0.5x	L009-R0.67x	L009-R1x	L009-R1.33x	L009-R2x	L009-R3.3x
L009-0.25x	341	13.4	Optical Mag.	0.07 - 0.87	0.1 - 1.2	0.15 - 1.75	0.19 - 2.33	0.29 - 3.5	0.5 - 5.78
			DFOV (mm)	91.4 - 7.4	64 - 5.3	42.7 - 3.7	33.7 - 2.7	22.1 - 1.8	12.8 - 1.1
			DFOV (inch)	3.6 - 0.29	2.52 - 0.21	1.68 - 0.144	1.326 - 0.108	0.869 - 0.072	0.504 - 0.044
			HFOV (mm)	78.6 - 6.3	55 - 4.6	36.7 - 3.1	28.9 - 2.4	19 - 1.6	11 - 1
			HFOV (inch)	3.093 - 0.249	2.165 - 0.18	1.444 - 0.124	1.14 - 0.093	0.747 - 0.062	0.433 - 0.037
			Video Mag. on 24 inch Monitor	7x - 83x	10x - 114x	14x - 167x	18x - 222x	28x - 333x	48x - 551x
L009-0.5x	165	6.5	Optical Mag.	0.14 - 1.75	0.2 - 2.4	0.29 - 3.5	0.39 - 4.66	0.58 - 7	0.96 - 11.55
			DFOV (mm)	45.7 - 3.7	32 - 2.7	22.1 - 1.8	16.4 - 1.4	11 - 0.9	6.7 - 0.6
			DFOV (inch)	1.8 - 0.144	1.26 - 0.105	0.869 - 0.072	0.646 - 0.054	0.434 - 0.036	0.262 - 0.022
			HFOV (mm)	39.3 - 3.1	27.5 - 2.3	19 - 1.6	14.1 - 1.2	9.5 - 0.8	5.7 - 0.5
			HFOV (inch)	1.547 - 0.124	1.083 - 0.09	0.747 - 0.062	0.555 - 0.046	0.373 - 0.031	0.226 - 0.019
			Video Mag. on 24 inch Monitor	13x - 167x	19x - 229x	28x - 333x	37x - 444x	55x - 667x	91x - 1100x
L009-0.75x	108	4.25	Optical Mag.	0.22 - 2.62	0.29 - 3.5	0.44 - 5.3	0.58 - 6.98	0.87 - 10.5	1.45 - 17.49
			DFOV (mm)	29.1 - 2.4	22.1 - 1.8	14.5 - 1.2	11 - 0.9	7.4 - 0.6	4.4 - 0.4
			DFOV (inch)	1.145 - 0.096	0.869 - 0.072	0.573 - 0.048	0.434 - 0.036	0.29 - 0.024	0.174 - 0.014
			HFOV (mm)	25 - 2.1	19 - 1.6	12.5 - 1	9.5 - 0.8	6.3 - 0.5	3.8 - 0.3
			HFOV (inch)	0.984 - 0.083	0.747 - 0.062	0.492 - 0.041	0.373 - 0.031	0.249 - 0.021	0.149 - 0.012
			Video Mag. on 24 inch Monitor	21x - 250x	28x - 333x	42x - 505x	55x - 665x	83x - 1000x	138x - 1666x
L009-1x	86	3.39	Optical Mag.	0.29 - 3.49	0.39 - 4.7	0.58 - 7	0.77 - 9.31	1.16 - 14	1.91 - 23.1
			DFOV (mm)	22.1 - 1.8	16.4 - 1.4	11 - 0.9	8.3 - 0.7	5.5 - 0.5	3.4 - 0.3
			DFOV (inch)	0.869 - 0.072	0.646 - 0.054	0.434 - 0.036	0.327 - 0.027	0.217 - 0.018	0.132 - 0.011
			HFOV (mm)	19 - 1.6	14.1 - 1.2	9.5 - 0.8	7.1 - 0.6	4.7 - 0.4	2.9 - 0.2
			HFOV (inch)	0.747 - 0.062	0.555 - 0.046	0.373 - 0.031	0.281 - 0.023	0.187 - 0.015	0.113 - 0.009
			Video Mag. on 24 inch Monitor	28x - 332x	37x - 448x	55x - 667x	73x - 887x	110x - 1334x	182x - 2200x
L009-1.5x	50	1.97	Optical Mag.	0.43 - 5.23	0.58 - 7	0.87 - 10.5	1.16 - 14	1.74 - 21	2.87 - 34.65
			DFOV (mm)	14.9 - 1.2	11 - 0.9	7.4 - 0.6	5.5 - 0.5	3.7 - 0.3	2.2 - 0.2
			DFOV (inch)	0.586 - 0.048	0.434 - 0.036	0.29 - 0.024	0.217 - 0.018	0.145 - 0.012	0.088 - 0.007
			HFOV (mm)	12.8 - 1.1	9.5 - 0.8	6.3 - 0.5	4.7 - 0.4	3.2 - 0.3	1.9 - 0.2
			HFOV (inch)	0.504 - 0.041	0.373 - 0.031	0.249 - 0.021	0.187 - 0.015	0.124 - 0.01	0.075 - 0.006
			Video Mag. on 24 inch Monitor	41x - 498x	55x - 667x	83x - 1000x	110x - 1334x	166x - 2000x	273x - 3300x
L009-2x	37	1.46	Optical Mag.	0.58 - 6.98	0.78 - 9.4	1.16 - 14	1.54 - 18.6	2.32 - 28	3.83 - 46.2
			DFOV (mm)	11 - 0.9	8.2 - 0.7	5.5 - 0.5	4.2 - 0.3	2.8 - 0.2	1.7 - 0.1
			DFOV (inch)	0.434 - 0.036	0.323 - 0.027	0.217 - 0.018	0.164 - 0.014	0.109 - 0.009	0.066 - 0.005
			HFOV (mm)	9.5 - 0.8	7.1 - 0.6	4.7 - 0.4	3.6 - 0.3	2.4 - 0.2	1.4 - 0.1
			HFOV (inch)	0.373 - 0.031	0.278 - 0.023	0.187 - 0.015	0.141 - 0.012	0.093 - 0.008	0.057 - 0.005
			Video Mag. on 24 inch Monitor	55x - 665x	74x - 895x	110x - 1334x	147x - 1772x	221x - 2667x	365x - 4401x

\* Data are estimated by calculation. Optional rear couplers available (0.5x, 0.67x, 1x, 1.33x, 2x, 3.3x) for lowering or increasing magnification without changing working distance. Video magnification will be increased by the same factor. Field of view will be changed by inverse factor.

DFOV (Diagonal Field of View) HFOV (Horizontal Field of View)