



ED-LENS-M12-230325-13 Data Sheet

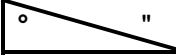
1/2.3" 13 Megapixel wide range M12 lens

Overview

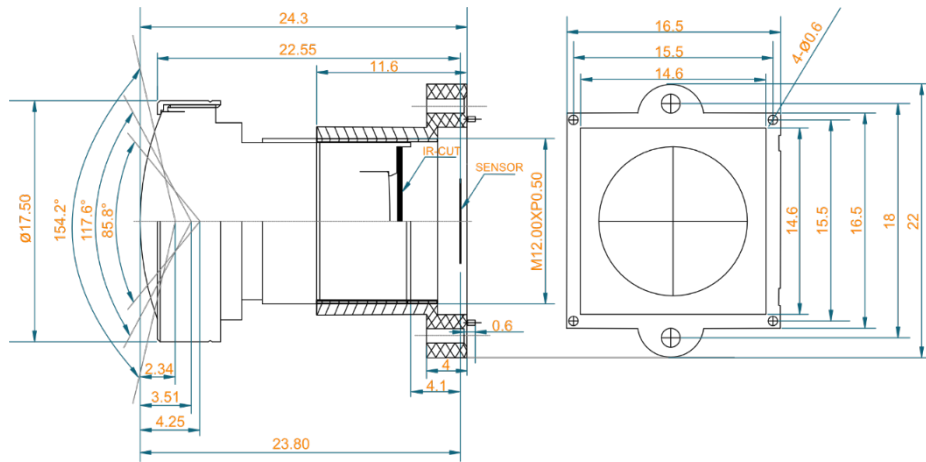
ED-LENS-M12-230325-13 lens can be used with Raspberry Pi M12 High Quality camera module and other cameras with M12 interface. This 3.25mm M12 lens provides an 117.6° Horizontal Field of View on 1/2.3" sensors.



Specifications

Resolution	13 Megapixel	
Optical format	1/2.3"	
TTL (Total Track Length)	23.80mm	
EFL (Effective Focal Length)	3.25mm	
Aperture	F2.7	
Mount	M12	
FOV (Field of View) DxHxV (°)		1/2.3" (IMX477)
	D	154.2
	H	117.6
	V	85.8
Optical Distortion	<-15.7%	
CRA (Chief Ray Angle)	<13.9°	
MOD (Minimum Object Distance)	0.89m	
BFL (Back Focal Length)	5.61mm	
MBF (Mechanical Back Focal)	4.10mm	
Structure	7G	
Operation	Focus	Manual
	Iris aperture	Fixed
Dimension (mm)	Φ17.5x19.7	
Weigh (g)	7.6	
Working Temperature	-20°C to +70°C	

Mechanical Drawing



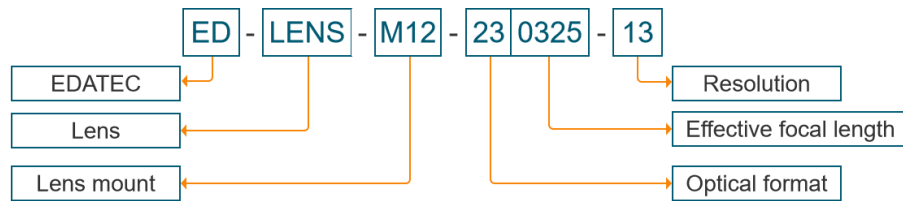
Unit	mm
Size Tolerance	0-10±0.1; 10-30±0.3; 30-120±0.5
Angle Tolerance	±2°

Actual Photo

Below picture was taken by Raspberry Pi M12 High Quality camera module with ED-LENS-M12 lens in the lab, it just gives a reference about the Field of View and resolution of the lens, it may be different with the pictures taken in different light environment and other different conditions.



Ordering Code



Example

P/N : ED-LENS-M12-230325-13

Configuration : EDATEC selected a wide angle of 13 Megapixel M12-mount lens for Raspberry Pi High Quality Camera module, this 3.25mm M12 lens provides an 117.6° Horizontal Field of View on 1/2.3" sensors.

More details about Ordering Code, please check "[Selection Guide](#)" below.

Selection Guide

Model NO.	Optical Format	EFL (mm)	BFL (mm)	Resolution (Megapixel)	Structure	F/NO.	FOV (D/H/V) (°)	MOD (m)	Size (mm)
ED-LENS-M12-175000-12	1/1.7"	50	24.2	12	8G	2.8	1/1.7": 10.6/8.6/6.4 1/1.8": 10.15/8.88/4.9	0.3	Φ22×44.9
ED-LENS-M12-203500-08	1/2"	35	7.569	8	8G	2.4	12.6/10.1/7.6	1	Φ20×33.7
ED-LENS-M12-202500-05	1/2"	25	11.98	5	6G	2.4	1/2": 18.3/14.7/11.1 1/3": 13.8/11.1/8.3 1/4": 10.4/8.3/6.3	0.3	Φ14×20.4
ED-LENS-M12-201600-05	1/2"	16	5.75	5	6G	2.0	1/2": 28.9/23.3/17.6 1/2.5": 26.1/24.7/15.8 1/3.6": 18.3/14.7/11.1	0.3	Φ14×16
ED-LENS-M12-201200-08	1/2"	12	5.06	8	8G	2.0	1/2": 41.4/36.4/20.9 1/2.3": 36.9/29.8/22.4	0.15	Φ15×20.24
ED-LENS-M12-180780-08	1/1.8"	7.8	6.06	8	8G	2.0	1/1.8": 60.8/50.3/38.6 1/2": 55.1/45.2/34.5	0.15	Φ18.7×29.27
ED-LENS-M12-180770-04	1/1.8"	7.7	5.37	4	7G1P	1.6	1/1.8": 65.4/57.2/32.4 1/2.3": 57.6/49.5/28.6 1/2.5": 53.2/46.5/26.3	0.3	Φ14×20
ED-LENS-M12-170800-12	1/1.7"	8	10.02	12	8G	1.8	1/1.7": 72.64/57.12/42.44 1/2.5": 50.7/44.4/32.6 1/3": 43/34.7/26.4	0.3	Φ17×33.1
ED-LENS-M12-180450-08	1/1.8"	4.5	5.9	8	12G	2.0	98.5/90.2/54.8	0.5	Φ24×24.8
ED-LENS-M12-180520-04	1/1.8"	5.2	5.21	4	7G1P	1.6	111/92.3/48.5	0.3	Φ14×20.7
ED-LENS-M12-170500-12	1/1.7"	5	6.39	12	8G	2.0	1/1.7": 121.4/90/65 1/2.5": 87/68.6/49.7 1/3": 70.9/55.5/41.2	0.3	Φ17×29.4
ED-LENS-M12-230347-08	1/2.3"	3.47	5.34	8	4G2P	2.2	137/106.8/79	1.11	Φ14×15.05

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ED-LENS-M12-230325-13

Model NO.	Optical Format	EFL (mm)	BFL (mm)	Resolution (Megapixel)	Structure	F/NO.	FOV (D/H/V) (°)	MOD (m)	Size (mm)
ED-LENS-M12-230325-13	1/2.3"	3.25	5.61	13	7G	2.7	154.2/117.6/85.8	0.89	Φ17.5×19.7
ED-LENS-M12-170320-12	1/1.7"	3.2	6.14	12	8G	2.0	1/1.7": 160/131/99 1/1.8": 153.6/129/88 1/2.3": 136/113.5/83	0.3	Φ28×38.9
ED-LENS-M12-180250-08	1/1.8"	2.5	5.59	8	8G	2.2	1/1.8": 180/142.4/106.8 1/2": 180/147.8/106.8 1/2.3": 180/142.4/106.8	0.3	Φ22×22.19
ED-LENS-M12-180160-05	1/1.8"	1.6	4.88	5	6G	2.0	1/1.8": 180/180/180 1/2.3": 180/180/180 1/3": 180/180/132	0.3	Φ20×16
ED-LENS-M12-170185-12	1/1.7"	1.85	6.25	12	9G	2.0	1/1.7": 185/185/185 1/2": 185/185/154.9 1/2.5": 185/185/126.4	0.15	Φ34×29.54
ED-LENS-M12-170183-08	1/1.7"	1.83	5.03	8	8E	2.07	186/186/186	0.2	Φ21×21.97
ED-LENS-M12-280167-08	1/2.8"	1.67	4.36	8	5G2P	2.0	1/2.8": 190/190/120 1/2.7": 190/190/115.9	0.3	Φ22×19.6
ED-LENS-M12-230155-12	1/2.3"	1.55	4.63	12	8G	2.0	1/2.3": 195/195/195 1/2.5": 195/195/172 1/2.7": 195/195/157	0.15	Φ26×23.16
ED-LENS-M12-250150-05-A	1/2.5"	1.5	3.66	5	6G	2.4	210/210/210	0.3	Φ16×13.4
ED-LENS-M12-230130-12	1/2.3"	1.3	2.96	12	8G	2.0	240/240/240	0.25	Φ22×18.24
ED-LENS-M12-230112-04	1/2.3"	1.12	3.01	4	4G2P	2.2	225/225/225	0.17	Φ17×18.19
ED-LENS-M12-230430-08	1/2.3"	4.3	3.62	8	4G2P	F3.0	1/2.3": 85.7/71.9/26.7 1/2.5": 79/71/43 1/2.8": 73/65/40 1/3": 67.5/60.3/36.4	0.3	Φ14.0×19.58
ED-LENS-M12-230280-08	1/2.3"	2.8	4.92	8	4G2P	F2.4	1/2.3": 115/102/85 1/2.5": 109.5/101.4/68	0.3	Φ18×18.26

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							1/2.7": 106/95/66 1/2.9": 100.9/92.6/60.4		
ED-LENS-M12-230390-08	1/2.3"	3.9	4.49	8	4G2P	F2.8	1/2.3": 90/77.5/61 1/2.7": 80.5/72.8/44.8 1/2.8": 78/71/43	0.3	Φ14.0×18.67
ED-LENS-M12-230325-12	1/2.3"	3.25	4.45	12	4G2P	F2.6	1/2.3": 101.6/88.5/71.6 1/2.5": 96.1/87.9/56.2 1/2.8": 89.4/81.2/51.0 1/3.06": 84.4/71.7/56.0	0.3	Φ14×19.0
ED-LENS-M12-230270-08	1/2.3"	2.7	4.97	8	5G2P	F2.8	1/2.3": 113/100/82.7 1/2.5": 108/97/67 1/2.8": 101/92.8/60.3	0.3	Φ16.0×18.43
ED-LENS-M12-230356-08	1/2.3"	3.56	5.92	8	4G3P	F2.5	1/2.3"(IMX117): 105/88/69 1/2.3"(OV12896): 107/89/70 1/2.3"(IMX557): 106/88/69 1/2.5"(JX-K08): 98/87/53	0.3	Φ14×16.42
ED-LENS-M12-230220-08	1/2.3"	2.2	4.36	8	7E	F1.8	1/2.3"(IMX577): 124/112/82 1/2.5"(IMX317): 122/114/78 1/2.7"(SC8238): 118/109/74 1/2.8"(IMX415): 116/107/71	0.3	Φ22×20.98
ED-LENS-M12-230191-12	1/2.3"	1.91	3.56	12	9G	F1.8	1/2.3"(IMX577): 185/185/140.5 1/2"(IMX385): 185/185/121 1/2"(IMX586): 185/185/185	0.3	Φ23.5×24.90

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