



ED-LENS-M12-180450-08 Data Sheet


1/1.8" 8 Megapixel wide range M12 lens

Overview

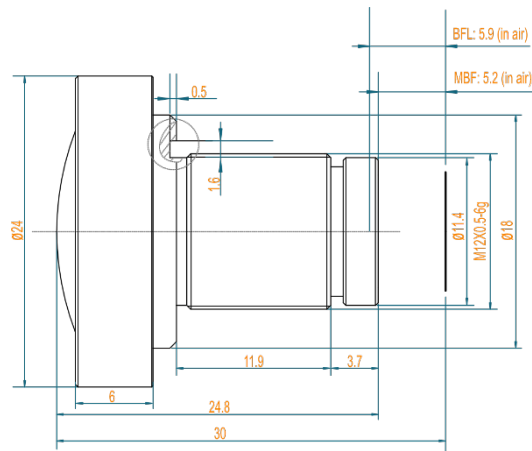
ED-LENS-M12-180450-08 lens can be used with Raspberry Pi M12 High Quality camera module and other cameras with M12 interface. This 4.5mm M12 lens provides a 90.2° Horizontal Field of View on 1/1.8" sensors.



Specifications

Resolution		8 Megapixel	
Optical format		1/1.8"	
TTL (Total Track Length)		30mm	
EFL (Effective Focal Length)		4.5mm	
Aperture		F2.0	
Mount		M12	
FOV (Field of View) DxHxV (°)		1/1.8"	
	D	98.5	
	H	90.2	
	V	54.8	
Optical Distortion		-14.2%	
CRA (Chief Ray Angle)		≤10.4°	
MOD (Minimum Object Distance)		0.5m	
BFL (Back Focal Length)		5.9mm	
MBF (Mechanical Back Focal)		5.2mm	
Structure		12G	
Operation	Focus	Manual	
	Iris aperture	Fixed	
IR Correction		YES	
IR Filter (nm)		650	
Dimension (mm)		Φ24×24.8	
Weigh (g)		13.5	

Mechanical Drawing



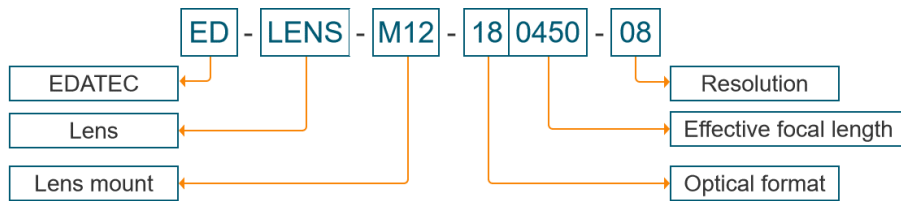
Unit	mm
Size Tolerance	0-10±0.1; 10-30±0.3; 30-120±0.5
Angle Tolerance	±2°

Actual Photo

Below picture was taken by Raspberry Pi M12 HQ camera module with this 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-M12-180450-08

Configuration : EDATEC selected a wide angle of 8 Megapixel M12-mount lens for Raspberry Pi High Quality Camera module, this 4.5mm M12 lens provides a 90.2° Horizontal Field of View on 1/1.8" 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) (°)	IR Correction	IR Filter (nm)	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	NO	650	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	NO	650	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	YES	650	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	YES	650	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	YES	650	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	YES	650	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	YES	650	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	YES	650	0.3	Φ17×33.1
ED-LENS-M12-180420-02	1/1.8"	4.2	6.18	2	9G	1.8	94/86.3/54.1	YES	650	0.3	Φ25×27.15
ED-LENS-M12-180450-08	1/1.8"	4.5	5.9	8	12G	2.0	98.5/90.2/54.8	YES	650	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	YES	650	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	YES	650	0.3	Φ17×29.4

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ED-LENS-M12-180450-08

Model NO.	Optical format	EFL (mm)	BFL (mm)	Resolution (Megapixel)	Structure	F/NO.	FOV (D/H/V) (°)	IR Correction	IR Filter (nm)	MOD (m)	Size (mm)
ED-LENS-M12-230347-08	1/2.3"	3.47	5.34	8	4G2P	2.2	137/106.8/79	NO	650	1.11	Φ14×15.05
ED-LENS-M12-230325-13	1/2.3"	3.25	5.61	13	7G	2.7	154.2/117.6/85.8	NO	650	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	YES	650	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	YES	650	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	YES	650	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	YES	650	0.15	Φ34×29.54
ED-LENS-M12-170183-08	1/1.7"	1.83	5.03	8	8E	2.07	186/186/186	YES	650	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	YES	650	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	YES	650	0.15	Φ26×23.16
ED-LENS-M12-250150-05	1/2.5"	1.5	3.31	5	6G	2.0	1/2.5": 210/210/210 1/3.2": 210/210/210	YES	650	0.3	Φ16×13.58
ED-LENS-M12-230130-12	1/2.3"	1.3	2.96	12	8G	2.0	240/240/240	NO	650	0.25	Φ22×18.24
ED-LENS-M12-230112-04	1/2.3"	1.12	3.01	4	4G2P	2.2	225/225/225	NO	650	0.17	Φ17×18.19

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