

Camera Lens Angle of View Calculator

The table below is a guide to enable you to select the correct lens when ordering Videoswitch IP cameras.

Format	Sensor Width (mm)	Sensor Height (mm)	Lens Focal Length	Horizontal Angle	Vertical Angle
1/4"	3.2	2.4	2.8	59.5	46.4
1/4"	3.2	2.4	4	43.6	33.4
1/4"	3.2	2.4	6	29.9	22.6
1/4"	3.2	2.4	12	15.2	11.4
1/3"	4.8	3.6	2.8	81.2	65.5
1/3"	4.8	3.6	4	62.0	48.5
1/3"	4.8	3.6	6	43.6	33.4
1/3"	4.8	3.6	12	22.6	17.1
1/2"	6.4	4.8	2.8	97.7	81.2
1/2"	6.4	4.8	4	77.4	62.0
1/2"	6.4	4.8	6	56.2	43.6
1/2"	6.4	4.8	12	29.9	22.6

This lens calculator displays the angle of view of common CCTV lense formats: 1/4 inch, 1/3inch , 1/2"

The angle of view of a lens is calculated using the following formula:

$$2 \times \tan^{-1}(x / (2 \times f))$$

where 'x' is the length of the image sensor in the direction that you want reading and 'f' is the focal length of the lens.

Angle of view is displayed in degrees.

Please check Videoswitch IP camera data sheets for available lens options.