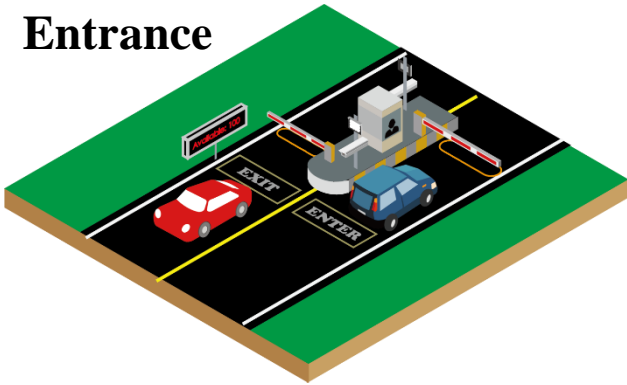


ANPR Camera Installation

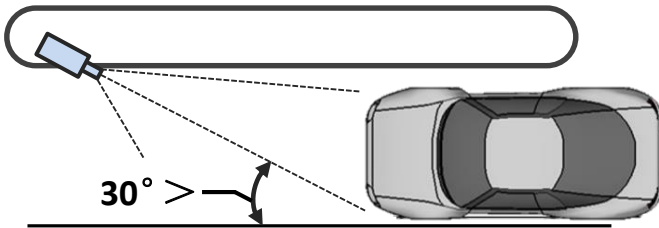
Hikvision Automatic Number Plate Recognition cameras help users to detect passing vehicles and captures the license plates. To obtain the maximum license plate recognition accuracy, you need to install the ANPR camera in a proper way to get the clear image.

Entrance



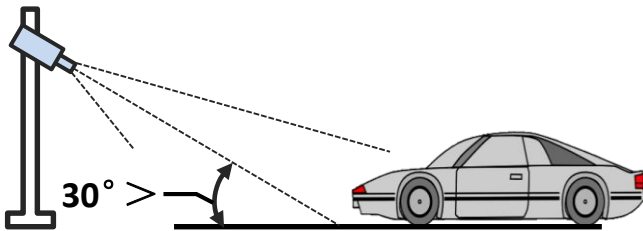
Horizontal angle

The view angle of the camera should be within 30 degrees to the path of movement.



Vertical angle

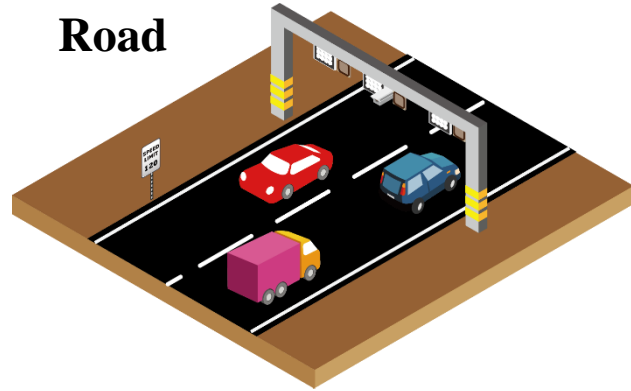
The angle between lens direction and horizontal should be less than 30 degrees.



Captured picture

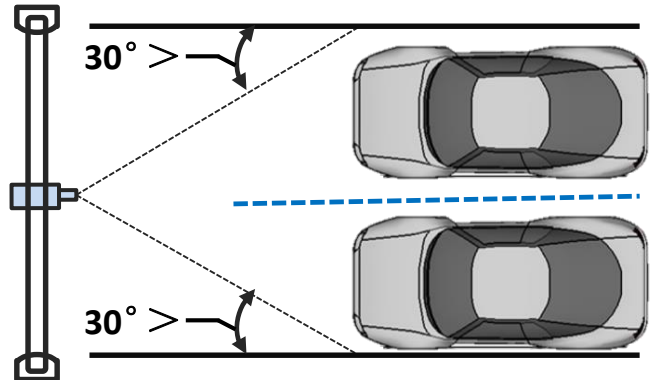


Road



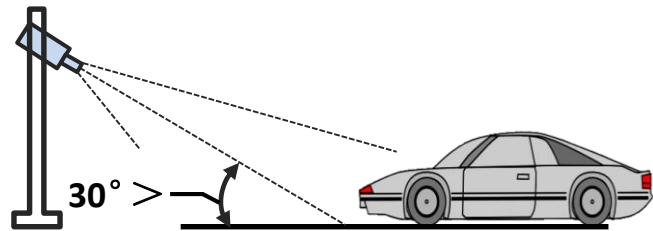
Horizontal angle

Should not exceed 30 degrees



Vertical angle

Should not exceed 30 degrees



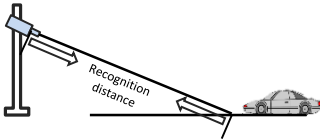
Captured picture



Camera Installation Tips

1.1 Select the Lens

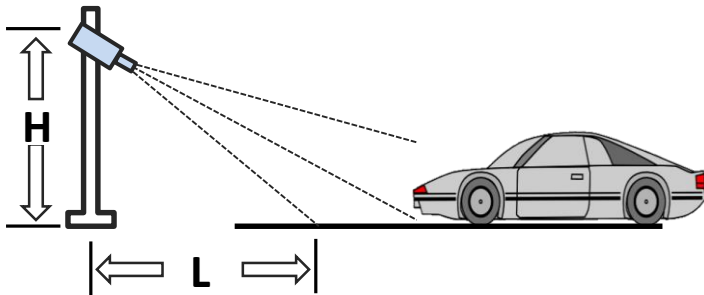
The recognition distance based on the camera's focal length, to get enough pixels in the frame, you should select a proper lens. Refer to the table below to select a proper lens.



Camera	Lens (mm)	Min. recognition distance(m)	Max. recognition distance(m)
4X26FWD	2.8-12	4	18
4X26FWD	8-96	12	142

1.2 Decide the Installing Position

The installing height(H) need to be fixed firstly, and then the detection range(L) can be calculated with a simple equation $L = \tan 30^{\circ} * H$.



H (m)	Minimal L (m)
1.5	4
2	4
3	5.1
3.5	6
4	6.8

$$L = \tan 30^{\circ} * H = 1.7 * H$$

Note: For the entrance application, it's better to install the camera on the height between 1.5m and 4m, and ensure the detection range longer than 4m.

1.3 License plate tilt angle

The license plate should be as horizontal as possible and the recommended tilt angle is within +/-5 degrees.

And vehicles in the detection area should go as straight as possible instead of turning left or right.