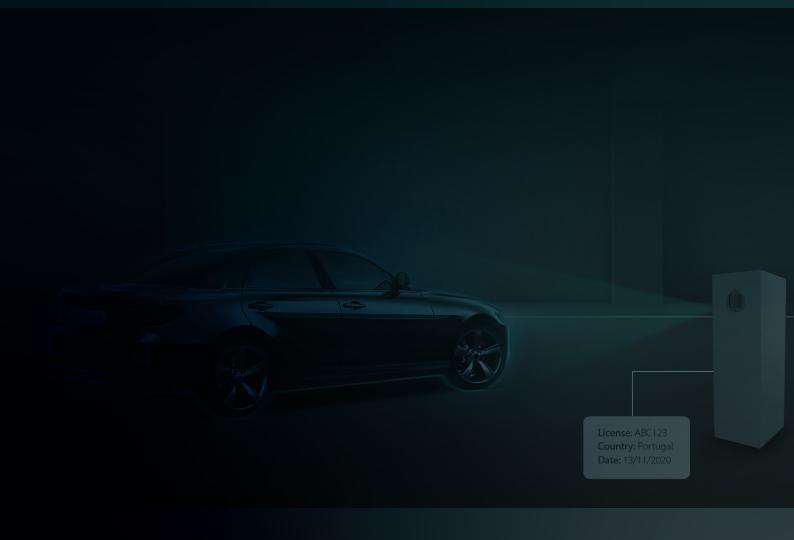


# 4 KEY FACTORS for a correct installation of ZKTeco LPR systems



**ZK-LPR Car ID** 





## LPR Solution KEY FACTORS

At ZKTeco we've developed a high-performance camera with an embedded License Plate Recognition application. In this guide, we've prepared the necessary steps to ensure proper installation, efficiency and best performance recommendations.

DISTANCE ANGLE PLATE POSITION VEHICLE SPEED





## Camera installation **DISTANCE**

1/4

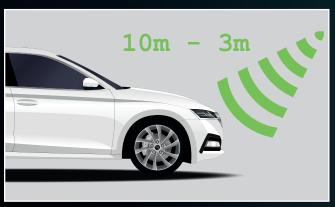
The distance between the camera and the subject is important for two reasons:





#### Dimension of the characters

The dimension of the characters of the number plate must be 30 pixels high or higher





#### **IR Lights**

The illumination power of the IR lights is affected by the distance; the near the better.

Place the camera as near as possible (between the recommendation)







## Camera installation **ANGLE**

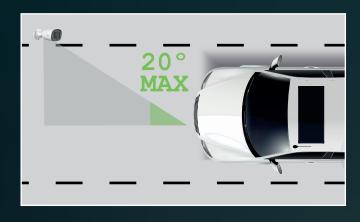
2/4

The recognition of the plate is affected by both vertical and horizontal angle

#### **Vertical**

## 25° MAX

#### Horizontal



		Height (m)					
Distance (m)	Angle	1	2	2,5	3	3,5	
	3	18	34	40	45	49	
	4	14	27	32	37	41	
	5	11	22	27	31	35	
	6	9	18	23	27	30	
	7	8	16	20	23	27	
	8	7	14	17	21	24	

		Horizontal distance (m)						
	Angle	1	1,5	2	2,5			
Distance (m)	3	18	27	34	40			
	4	14	21	27	32			
	5	11	17	22	27			
	6	9	14	18	23			
	7	8	12	16	20			
	8	7	11	14	17			

Lane straight as possible:
An installation in a curve will reduce the accuracy of the camera







## Car parameters **PLATE POSITION**

**3**/4

The angle of inclination of the vehicle's number plate must not exceed 5°







√ 5° MAX

Position the camera with the smallest possible tilt angle







## Car parameters VEHICLE SPEED

4/4

For optimum performance, the speed of the vehicle should not exceed 20km/h



20 km/h MAX

Control traffic flow so that vehicle speed is as low as possible







### **THANK YOU!**

SHARE YOUR QUESTIONS & SUGGESTIONS IN COMMENTS