Requirements for video camera installation and configuration

The use of high-resolution video surveillance cameras is recommended for the correct performance of *Face Intellect* software package. Video surveillance cameras used with *Face Intellect* software package must support color video. The camera technical specifications which are necessary for the correct operation of the *Huawei* recognition module are listed in the table below:

Recognition module	Camera technical specifications
Huawei	- Resolution: 2 million pixels (1080p), minimum: 720p. - CCD / CMOS: 1/1.8 or higher. - H.264 and RTSP support. - The maximum encoding speed should be at least 4 Mbps. - Guaranteed image quality in low light conditions.

For the proper face recognition using *Face Intellect* software package it's necessary to install and configure the video cameras in such a way that the following requirements are fulfilled:

1. The frame rate must not be less than 12 fps and not less than 6 fps for face recognition at turnstiles.
2. The maximum deviation of the face in the camera FoV from the face-forward position should not exceed 15 degrees (no more than 5 degrees for the *Huawei* recognition module).
3. The distance between pupils on the received photos of the captured face must correspond to the requirements of the used recognition module:
   a. *Cognitec:* not less than 96 pixels;
   b. *Tevian:* not less than 32 pixels;
   c. *VisionLabs:* not less than 50 pixels;
   d. *Huawei:* not less than 60 pixels;
   e. *STC:* not less than 50 pixels.
4. The size of the front face image for the *Huawei* module should be at least 70*70 pixels; 120*120 pixels size is recommended, but it should not exceed 300*300 pixels.
5. There should be minimum mutual overshadowing of the captured faces.

> ⓘ **Note**
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> For the *Huawei* module, it is necessary to install the camera in such way so that people move directly to the camera.

6. The faces should be evenly illuminated with a diffused light of at least 200 lux. Directional side lighting is not allowed.
7. The sharpness of the captured faces on the received photos must be over 64 grayscale. Deficient or exceeding illumination is not allowed.
8. There should be no back light and sharp gradients of light and shade.
9. The photos of the captured faces received from video cameras should be clear. Image blurring caused by motion is not allowed.

> ⓘ **Note**
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> The required distance between the camera and the face can be set using a lens with required focal length.