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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 37300-2018

**Specifications for video and image information collection in
public security key areas**

公共安全重点区域视频图像信息采集规范

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1 Scope

GB 37300-2018 is the Chinese national standard on specifications for video and image information collection in public security key areas, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 28 December 2018 by the State Administration for

Market Regulation; Standardization Administration of China, and has been in force since 1 January 2020. Classification: ICS 13.310, CCS A91. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard specifies the video and image information collection location and collection type, technical requirements and collecting device requirements for the public key areas. This Standard is applicable to the video and image information collection and management for the public key areas, key industries and fields involved the public areas in the public security video surveillance network system.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 25724 Technical Specifications for Surveillance Video and Audio Coding for Public Security

GB/T 28181 Technical Requirements for Information Transport, Switch and Control in Video Surveillance Network System for Public Security

GB 35114-2017 Technical Requirements for Information Security of Video Surveillance Network System for Public Security

GB 50198-2011 Technical Code for Project of Civil Closed-Circuit Monitoring Television System
GA/T 645-2014 Speed Dome for Security Surveillance
GA/T 669.3-2008 Technical Standard of City Area Monitoring And Alarming Network System - Part 3: Technical Specifications of Front Information Collecting
GA/T 1127-2013 General Technical Requirements for Cameras Used in Security Video Surveillance

- a) Video information: continuous video streams and video clips;
- b) Image information: single frame video and picture;
- c) Audio information: audio associated with the video information;
- d) Alarm information: alarm information associated with the video information and image information;
- e) Equipment information: equipment information associated with the video and image information; it includes but not limited to the equipment information, geographic information and absolute time information, etc. specified in GB/T 28181 and GB/T 25724;

f) Other information: information output by the collecting device with intelligent video analysis function or output by the collecting device connected with other connected devices. It includes but not limited to monitoring extended data information specified in

GB/T 25724, and the semantic attribute information of video image information related to the video clips and images specified in GA/T 1400.1.

5 Technical Requirements

5.1 Collection principle According to the site conditions and application requirements, information collection shall follow the following principles:

- a) The information collection shall follow the principles of data authenticity and integrity;
- b) The principle of maximizing the extraction of the collected target information;
- c) The principle of optimizing the feature extraction of target information;
- d) The principle of fastest responding to the input information on site.

5.2 Basic requirements for collection

5.2.1 The collected video and image information shall meet the requirements for target recognition and shall cover the range of monitoring. The wide range of macroscopic observations shall be combined with fixed monitoring of the specific target areas; while the time-sharing scanning shall be combined with real-time tracking specific target. When using multiple cameras to monitor in different areas, the monitoring areas shall be connected with each other; so that achieve effective coverage of the entire monitoring area.

- a) The supporting image formats include JPEG, JPEG2000, BMP, PNG, TIF, etc.; the image size pixel is no less than 1920x1080;
- b) Horizontal resolution: when the ambient light is no less than 300lx, the resolution shall be no less than 900TVL; when the ambient light is 0.1lx below, the resolution shall be no less than 650TVL;
- c) The maximum brightness discrimination level shall be no less than Level-10;
- d) Color reproduction: when the ambient light is no less than 300lx, the average DeltaE ≤ 15 .

5.5 Overlay information requirements If the character information is overlaid on the video and image information, it shall not shield the important targets and focus areas on the video and image.

5.6 Requirements for the number of target pixel of the video and image information for target recognition When the target is imaged on the imaging surface of the camera, and can best reflect the shooting location and conditions of the target features:

- a) When it is required to distinguish the physical characteristics of the person (such as gender, clothing, body type, etc.), the number of the vertical pixels of the target shall be no less than 200;
- b) When it is required to distinguish the carrying items of the person (such as carrying method, item type, etc.), the number of the vertical pixels of the target shall be no less than 300;
- c) When it is required to distinguish the facial features of the person (such as hair style, facial features, accessories), the number of the horizontal pixels of the person's head shall be no less than 300;
- d) When it is required to distinguish the vehicle type, the number of horizontal pixels of the target shall be no less than 180;
- e) When it is required to distinguish the vehicle license plate number, the number of the horizontal pixels of the license plate shall be no less than 100.

5.7 Quality requirements for audio information For the collected audio information only used for voice intercom, its digital audio sampling frequency shall be no less than 8kHz; the number of sampling digits shall be no less than 8. For those used for the environmental sound collection, its digital audio sampling frequency shall be no less than 16kHz; the number of the sampling digits

6.2.2 Storage interface Interface such as USB interface or SD/Micro SD memory card shall be connected to an external storage medium.

6.2.3 Exchange agreement

6.2.3.1 The video and audio signals output by the collecting device shall be digitally coded; its video sampling mode, video and audio coding data formation shall conform to the provisions of GB/T 25724; the protocol connected to the network system shall conform to the provisions of GB/T 28181.

6.2.3.2 For the collecting device that can separately upload the video and image structured information, the interface protocol shall conform to the provisions of GA/T 1400.4.

6.3 Security requirements

6.3.1 Physical security The anti-destructive capacity of the collecting device shall at least meet the following requirements:

- a) The enclosure protection capability shall at least meet the requirements for Class- A specified in

5.1.1.3 of GA/T 1127-2013.

- b) The anti-riot performance shall meet the requirements in