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

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**Video and image analysis system for public security-Part 1:  
General technical requirements**

公安视频图像分析系统 第1部分：通用技术要求  
(English Translation)

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### 1 Scope 1

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Public Security Video Image Analysis System Part 1: General technical requirements

### **1 Scope**

This part specifies the technical requirements for the system composition and system functions of the public security video image analysis system.

This part applies to the planning and design, software development, testing and acceptance of public security video image analysis systems. Video image analysis in other fields the analysis system can be used for reference.

2 Normative references the following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 28181-2016 Technical requirements for information transmission, exchange and control of public security video surveillance networked systems GB/T 30147-2013 Technical requirements for real-time intelligent analysis equipment for security surveillance video GA/T 669.2-2008 Urban Monitoring and Alarm Networking System Technical Standard Part 2: Safety Technical Requirements GA/T 893-2010 Application terminology of security biometric identification GA/T 1399.2-2017 Public Security Video Image Analysis System Part 2: Video Image Content Analysis and Description Technical Requirements GA/T

1400.1-2017 Public Security Video Image Information Application System Part 1: General Technical Requirements GA/T 1400.3-2017 Public Security Video Image Information Application System Part 3: Database Technical Requirements GA/T 1400.4-2017 Public Security Video Image Information Application System Part 4: Interface Protocol Requirements IETF RFC5905 Network Time Protocol Version 4 (NetworkTimeProtocolVersion4)

### 3 Terms and definitions, abbreviations

3.1 Terms and definitions the terms and definitions defined in GB/T 30147-2013, GA/T 893-2010, GA/T 1400.1-2017 and the following terms and definitions apply to this document.

#### 3.1.1

Video image analysis system videoandimageanalysissystem Analyze and process videos and images, identify the content of videos and images, improve video and image quality, and quickly find and locate key

Note the information system.

#### 3.1.2

Video image content analysis videoandimagecontentanalysis Detect or identify the characteristics, behaviors, and quantities of people, vehicles, objects and other objects in video images.

#### 3.1.3

Video image content description contentdescriptionofvideoandimage Use computer-recognizable and structured data to express the results of video image content analysis.

#### 3.1.4

Video image description data videoandimagedescriptiondata Data that expresses people, vehicles, objects and other objects, scenes, behaviors, and events extracted from video images.

#### 3.1.5

Video image enhancement videoandimageenhancement Using image processing technology to improve the overall video image or specific parts of the video image clarity, contrast and other quality indicators.

#### 3.1.6

Video image restoration videoandimagerestoration Using the prior knowledge in the image degradation process, through modeling and other means, eliminate the noise caused by the

sensor, the inaccurate focus of the camera, the object and the phase.

Image degradation caused by relative movement between cameras, random atmospheric flow, and haze effects.

#### 3.1.7

Video image search videoandimagesearch Find and locate people, vehicles, objects and other objects in video images.

#### 3.1.8

Target object

Specific objects such as people, vehicles, and objects in video images.

#### 3.1.9

Object detection and feature extraction object detection and feature extraction to locate the target in the video image, and analyze and judge the target's color, category and other attributes.

#### 3.1.10

Objectrecognition

Identify attributes such as the identity of the target in the video image.

#### 3.1.11

Objectbehavioranalysis Detect and recognize the behavior of targets in video images.

#### 3.1.12

Objectquantityanalysis Perform statistical analysis on the number or magnitude of targets in the video image.

#### 3.1.13

Object color detection Analyze and judge the color of the target in the video image.

#### 3.1.14

Pedestriandetection

Recognize pedestrians and their positions and sizes in video images.

#### 3.1.15

Personattributeanalysis Analyze and judge the gender, age, clothing and other attributes of the person in the video image.

#### 3.1.16