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

**GA/T 1154.3-2017**

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**Video image analysis instrument-Part 3: Technical requirements  
for video image retrieval**

视频图像分析仪 第3部分：视频图像检索技术要求  
(English Translation)

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Video image analyzer Part 3: Video image retrieval technical requirements

### **1 Scope**

This part of GA/T 1154 specifies the terms, definitions and abbreviations of video image analyzers related to video image retrieval functions and performance Language, general rules, technical requirements, test methods, inspection rules. This part is the specific refinement of the image retrieval part in GA/T 1154.1.

This section applies to the development, production, inspection and application of video image analyzers with video image retrieval functions.

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 30147-2013 Technical requirements for real-time intelligent analysis equipment for security surveillance video GA 36 People's Republic of China Motor Vehicle Number Plate GA 802 Motor Vehicle Type Terms and Definitions GA/T 1154.1-2014 Video Image Analyzer

Part 1: General Technical Requirements GA/T 1154.2-2014 Video Image Analyzer Part 2: Video Image Abstract Technical Requirements GA/T 1400.1 Public Security Video Image Information Application System Part 1: General Technical Requirements GA/T 1400.4 Public Security Video Image Information Application System Part 4: Interface Protocol Requirements

### 3 Terms, definitions and abbreviations

3.1 Terms and definitions GB/T 30147-2013, GA/T 1154.1-2014, GA/T 1154.2-2014, GA/T 1400.1 and the following techniques the terms and definitions apply to this document.

#### 3.1.1

Video image retrieval Focus on objects or events of people, vehicles, objects, etc. in video images, based on category, color, shape, texture, behavior, appearance time, etc.

The process of feature indexing and rapid positioning.

#### 3.1.2

Cluevideo

A video clip of the target and event intercepted from the video.

[GA/T 1154.2-2014, definition 3.1.4] 3.1.3 Clueimage the original image containing the target and event of interest or the frame containing the target and event intercepted from the video.

#### 3.1.4

Snapshot

The image of the target object at a certain point in time. It can be a frame captured from the original video, or a specific focus on the background of the original video

d) Video file format. It should be compatible with more than or equal to 30 original video formats (see the attached file name suffix for the supported original video format 30 kinds of video formats in A), the video can be played normally after transcoding, and there is no abnormal conditions such as blurred screen, black screen, and stuck screen, and can preprocess and retrieve normally;

e) The video screenshot, the format should meet the requirements of the clue image data, and the size of the target at the input video image D1 resolution should not be Less than 48x96 pixels.

5.1.1.3 Video image attributes it should be able to detect the attributes of the imported original video image, and be able to view the video image resolution, video duration, video frame rate, and video file size.

Small, video image format, hash value, etc.

### 5.1.2 Video image management

5.1.2.1 Video image playback the following playback methods are supported.

a) Multi-window playback should support greater than or equal to 6 screens to watch related videos, and should support greater than or equal to 6 screens to watch the same video Frequency monitoring points in the original video at different time periods.

Should support viewing the original video or condensed video of at least 6 videos, and allow the user to adjust each video separately during the viewing process Playback position and progress.

b) Special effects playback should support loop playback, full screen playback, screen zooming, fast forward playback, slow forward playback, frame forward and backward playback, etc.

form.

c) Synchronous playback should support simultaneous playback of multiple windows, including simultaneous start, simultaneous pause, simultaneous stop, simultaneous fast forward/slow playback, and simultaneous forward N Seconds, and start playing from a certain absolute time at the same time.

d) Asynchronous playback should support individual control of each video playback window through the playback control area.

e) Video scrolling

It is advisable to support the original video to start rolling playback with the monitoring point as a unit or to specify a rolling playlist by yourself.

f) Variable speed playback when playing the original video, it is advisable to support normal playback of the target segment, and skip the targetless segment directly or at 2/4/8/16/32x speed Play.

5.1.2.2 Video image tagging the following video image tagging functions are supported.

a) Target circle mark it should support taking screenshots and video clips of videos, marking people and vehicles with symbol circles.

b) Time stamp

Should support when playing video, superimpose the corrected absolute time mark on the original video screen, the superimposed position can be manually by the user select.

### 5.1.3 Search task management

5.1.3.1 Task type setting should support retrieval task setting and submission. The tasks include.