

ICS 13.310  
CCS A 91



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

**GB/T 46344.1-2025**

---

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

公共安全视频图像分析系统 第1部分：通用技术要求

**Issued on: October 5, 2025**

**Implemented on: May 1, 2026**

---

**Issued by: State Administration for Market Regulation;  
Standardization Administration of the PRC**

# Table of Contents

|                                                        |     |
|--------------------------------------------------------|-----|
| Preface .....                                          | III |
| Introduction .....                                     | IV  |
| 1 Scope .....                                          | 1   |
| 2 Normative References .....                           | 1   |
| 3 Terms, Definitions, and Abbreviations .....          | 1   |
| 3.1 Terms and Definitions .....                        | 1   |
| 3.2 Abbreviations .....                                | 2   |
| 4 System Composition and External Connections .....    | 2   |
| 4.1 System Composition .....                           | 2   |
| 4.2 External Connections .....                         | 3   |
| 5 Video image input .....                              | 4   |
| 5.1 Video image format requirements .....              | 4   |
| 5.2 Video image quality requirements .....             | 4   |
| 6 Application Functions .....                          | 4   |
| 6.1 Task Management .....                              | 4   |
| 6.2 Video Image Content Analysis and Description ..... | 4   |
| 6.3 Video Image Enhancement .....                      | 4   |
| 6.4 Video Image Retrieval .....                        | 5   |
| 6.5 Data Storage and Result Display .....              | 5   |
| 7 Interface Functions .....                            | 5   |
| 8 Management Functions 5. ....                         | 5   |
| 8.1 User Management .....                              | 5   |
| 8.2 Log Management .....                               | 6   |
| 8.3 Clock Synchronization .....                        | 6   |
| 8.4 Condition Monitoring .....                         | 6   |
| 8.5 Resource Management .....                          | 6   |
| 8.6 Configuration Management .....                     | 6   |
| References .....                                       | 7   |

## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work

Guidelines Part 1: Structure and Drafting Rules of Standardization Documents". Drafting.

This document is Part 1 of GB/T 46344 "Public Security Video Image Analysis System". GB/T 46344 has the following publications. part.

- Part 1: General Technical Requirements;
- Part 2: Technical Requirements for Video Image Content Analysis and Description;
- Part 3: Requirements for Video Image Enhancement Techniques;
- Part 4: Technical Requirements for Video Image Retrieval;
- Part 5: Inspection Specifications.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Public Security of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Standardization of Security and Alarm Systems (SAC/TC100).

This document was drafted by. the First Research Institute of the Ministry of Public Security, Zhejiang Uniview Technologies Co., Ltd., Zhejiang Dahua Technology Co., Ltd., and Yisa Technology.

Hikvision Technology Co., Ltd., Hangzhou Hikvision Digital Technology Co., Ltd., Beijing Geling DeepVision Information Technology Co., Ltd., Huawei Technologies Co., Ltd.

Vimicro Technology Co., Ltd., Suzhou Keda Technology Co., Ltd., and Beijing Megvii Technology Co., Ltd.

The main drafters of this document are: Li Pengfei, Wang Jianyong, Wang Lie, Zhao Xuan, Gao Lei, Zhao Huifang, Sun Lili, Lu Yuhua, Kong Weisheng, and Wu Canyi.

Li Hongmei, Du Yunpeng, Yin Ping, Sun Yani, Wang Wen, Meng Fanhui, Wu Chunmei, Li Wei.

## Introduction

GB/T 46344 "Public Security Video Image Analysis System" specifies the composition, external connections, and other aspects of a public security video image analysis system.

The specifications standardize functional requirements, performance requirements, and testing methods, aiming to guide the design, development, testing, and implementation of public security video image analysis systems.

Acceptance testing will promote the efficient networked application of video image analysis

technology in the field of public safety video surveillance. GB/T 46344 is proposed to be implemented by five departments. Composition.

- Part 1: General Technical Requirements. The purpose is to establish the overall technical requirements that public safety video image analysis systems must adhere to. Require.
- Part 2: Technical Requirements for Video Image Content Analysis and Description. The purpose is to standardize the technical requirements for video image analysis systems used in public security systems.

The technical components, task flow, functions, performance, and function-interface correspondence of video image content analysis and description. Require.

- Part 3: Video Image Enhancement Technical Requirements. The purpose is to standardize video image enhancement techniques in public security video image analysis systems.

Strong technical requirements for functional components, processing flow, functions, and performance.

- Part 4: Technical Requirements for Video Image Retrieval. The purpose is to standardize video image retrieval technology in public security video image analysis systems.

Technical requirements for the search function, including its components, search process, functions, performance, and the correspondence between functions and interfaces.

- Part 5: Testing Standards. The purpose is to standardize the testing environment, testing procedures, and functions of public security video image analysis systems.

Technical requirements such as inspection and performance testing.

Public Security Video Image Analysis System Part 1: General Technical Requirements

## 1 Scope

This document specifies the system composition and external connections, video image input, and application functions of the public security video image analysis system.

Technical requirements such as interface functions and management functions.

This document applies to the planning, design, software development, testing, and implementation of public security video image analysis systems (hereinafter referred to as "analysis systems"). acceptance.

## 2 Normative references

GB/T 28181

GB/T 30147-2013

GB 37300-2018

GB/T 46344.2-2025

GB/T 46344.3-2025

GB/T 46344.4-2025

GB/T 46361-2025

GB/T 46362-2025

GB/T 46363-2025

GB 50198-2011

### **3.1 Terms and Definitions**

The terms and definitions defined in GB/T 30147-2013, GB/T 46361-2025 and GB/T 46362-2025, as well as the following terms and definitions, apply. In this document.

#### **3.1.1**

A system that performs content analysis and description on video images to improve video image quality and discover and locate information of interest.

#### **3.1.2**

Video clips, images, files related to video clips and images, and their related descriptive information.

Note. The video image information in this file does not include continuous video streams.