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

GB/T 46344.3-2025

**Video and image analysis system for public security - Part 3:
Technical requirements for video and image enhancement**

公共安全视频图像分析系统 第3部分：视频图像增强技术要求

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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 3 of GB/T 46344 "Public Security Video Image Analysis System". GB/T 46344 has the following publications. part.

1.General Technical Requirements;

2.Technical Requirements for Video Image Content Analysis and Description;

3.Requirements for Video Image Enhancement Techniques;

4. Technical Requirements for Video Image Retrieval;

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., and Hangzhou Hikvision Digital Technology Co., Ltd. Company, National Security and Alarm System Product Quality Inspection and Testing Center (Beijing), Zhejiang Dahua Technology Co., Ltd., China Science and Technology University, Beijing Megvii Technology Co., Ltd., Huawei Technologies Co., Ltd., National Engineering Laboratory for Intelligent Analysis and Sharing Application Technology of Video Image Information Laboratory, Gosuncn Technology Group Co., Ltd., Suzhou Keda Technology Co., Ltd., Vimicro Technology Co., Ltd. The main drafters of this document are. Yin Ping, Wu Canyi, Xu Qiong, Liao Shuanglong, Lu Yuhua, Kong Weisheng, Wang Jing, Deng Xuran, Du Yunpeng, and Dai Liefeng. Wang Jianyong, Li Hongmei, Wu Dongsheng, Zou Wenyi, Huang Qiangxiong, Fan Meng.

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.

1. General Technical Requirements. The purpose is to establish the overall technical requirements that public safety video image analysis systems must adhere to. Require.

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.

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.

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.

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 Scope

GB/T 46344.3-2025 is the Chinese national standard covering enhancing poor surveillance footage - the denoising, deblurring, contrast and super-resolution operations, the limits beyond which enhancement invents detail rather than recovering it, and the record of what was applied, which matters when the image is evidence. Part 3 of the series, first edition. In force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document specifies the functional components, processing flow, functions, and performance of video image enhancement in public security video image analysis systems. Technical requirements. This document applies to the planning, design, software development, testing, and acceptance of public safety video image analysis systems.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 27964-2011 Fog Forecast Levels

GB/T 28181 Technical requirements for information transmission, exchange and control of public security video surveillance systems

GB/T 46344.1-2025 Public Security Video Image Analysis System - Part

3 Terms, Definitions and Abbreviations

3.1 Terms and Definitions The terms and definitions defined in GB/T 46361-2025, GB/T 46362-2025 and

GB/T 46344.1-2025 apply to this standard. document.

3.2 Abbreviations The following abbreviations apply to this document. TVL. Television lines

4.1 Functional Components

4.1.1 Composition and External Connections of Video Image Enhancement Function in the

Public Security Video Image Analysis System (hereinafter referred to as the "Analysis System") See Figure 1.

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