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

GB/T 28789-2025

Replacing GB/T 28789-2012

Video traffic incident detector

视频交通事件检测器

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 28789-2012 "Video Traffic Incident Detector". Compared with GB/T 28789-2012, except for the structural adjustment Besides the editorial changes, the main technical changes are as follows.

- Changed the scope of application (see Chapter 1, Chapter 1 of the 2012 edition);
- Added the terms and definitions of "highway weather events", "road surface condition events", "intrusion events", "speeding vehicle events" and "fireworks events" (See 3.1, 3.2, 3.7, 3.10 and 3.12);
- Deleted the term "pedestrian incident" and its definition (see 3.5 of the 2012 edition);
- Changed the definitions of the terms "traffic event", "motor vehicle departure event" and "starting detection distance" (see 3.3, 3.11, 3.16, 2012 3.1, 3.8, and 3.12 of the 2012 edition); changed the term "observation range" to "longitudinal observation range" and changed the definition (see 3.17,... Version 3.13);
- Changed the composition of the video traffic incident detector (see 4.1, 4.1 of the 2012 edition);
- Added classification of video traffic event detectors (see 4.2);
- Changed the provisions on video traffic incident detector models (see 4.3, 4.2 of the 2012

edition);

- Deleted the provisions on applicable conditions (see 5.1 of the 2012 edition);
- Changed the functional requirements (see 5.2, 5.3 of the 2012 edition);
- Changed the requirements for the effective detection range of traffic incidents (see 5.3.1, 5.4.1 of the 2012 edition);
- Changed the traffic incident detection rate requirements (see 5.3.2, 5.4.2 of the 2012 edition);
- Changed "traffic parameter detection accuracy requirements" to "traffic parameter detection relative error", and changed traffic flow, speed detection and other traffic Requirements for relative errors of general parameter testing (see 5.3.3, 5.4.3 of the 2012 edition);
- Changed the requirements for low temperature resistance and high temperature resistance of environmental adaptability (see 5.5.1 and 5.5.2, 5.7.1 of the 2012 edition) and 5.7.2);
- Increased environmental adaptability requirements for temperature alternating resistance, salt spray corrosion resistance and weathering resistance (see 5.5.4, 5.5.6 and 5.5.7); Changed the requirements for mechanical vibration resistance and protection level of environmental adaptability (see 5.5.5 and 5.5.8, 2012 edition 5.7.4 and 5.5.6);
- Changed the requirements for electromagnetic compatibility (see 5.6, 5.5.5 of the 2012 edition);
- Deleted the requirements for video signal input supported by the system (see 5.8 of the 2012 edition); added technical requirements for communication interfaces (see 5.8);
- The test conditions have been changed (see 6.1, 6.1 of the 2012 edition);
- Deleted the processing of test results (see 6.2 of the 2012 edition);
- Changed the test methods for appearance quality, shape and size (see 6.2, 6.3 of the 2012 edition);
- Changed the test methods for functional requirements and basic performance requirements (see 6.3 and 6.4, 6.4 and 6.5 of the 2012 edition);
- Changed the test methods for insulation resistance, electrical strength and safety grounding (see 6.5.1 to 6.5.3, 6.6.1 to 6.6.3 of the 2012 edition);
- Added test methods for temperature alternating resistance, salt spray corrosion resistance and weathering resistance of environmental adaptability (see 6.6.4, 6.6.6 and 6.6.7);
- Changed the test method for electromagnetic compatibility (see 6.7, 6.6.5 of the 2012 edition);

- Added test methods for communication interfaces (see 6.9);
- Deleted the test method for video signal input supported by the system (see 6.9 of the 2012 edition);
- Changed the inspection classification requirements (see 7.1, 7.1 of the 2012 edition);
- Changed the requirements for type inspection and factory inspection (see 7.1.1 and 7.1.2, 7.2 and 7.3 of the 2012 edition); added inspection items Requirements for items, batching, sampling and judgment rules (see 7.2 to 7.4).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Standardization of Intelligent Transport Systems (SAC/TC268).

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This document was first published in 2012 and this is the first revision.

1 Scope

This document specifies the composition, classification and model, technical requirements, test methods, inspection rules and signs, package Packaging, transportation and storage.

This document is applicable to video traffic event detectors used in places such as highways and ordinary roads, or those based on video traffic event detection technology.

The production, use and inspection of fusion traffic incident detectors based on fusion technology and supplemented by laser and millimeter wave radar detection technology.

2 Normative references

GB/T 191

GB/T 2423.1

GB/T 2423.2

GB/T 2423.3

GB/T 2423.10

GB/T 2423.17

GB/T 2423.22

GB/T 4208-2017

GB/T 5080.7

GB/T 17626.2

GB/T 17626.3

GB/T 17626.4

GB/T 22040

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Meteorological events that occur on roads and affect vehicle traffic and traffic safety.

Note. Mainly refers to special events such as rainfall, snowfall, heavy fog and sandstorms.

3.2 Road condition event roadconditionevent

Abnormal road conditions that occur on the road and affect vehicle passage and traffic safety.

Note. Mainly refers to special events such as road collapse, bridge collapse and blockage caused by slope landslide.