

ICS 93.080.30
CCS R 84

GA

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

GA/T 497-2009

Replacing GA/T 497-2009

**General technical specifications for intelligent monitoring and
recording system for vehicles on roads**

公路车辆智能监测记录系统通用技术条件

(English Translation)

Issued on: November 23, 2016

Implemented on: January 1, 2017

Issued by: Ministry of Public Security

Table of Contents

- Preface
- 1 Scope
- 2 Normative reference document
- 3 Terms and definitions
- 4 Technical requirements
- 5 Test method
- 6 Inspection rules

Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GA/T 497-2009 "General technical conditions for intelligent monitoring and recording system for road vehicles".

Compared with GA/T 497-2009, the main technical changes are as follows.

- modified standard name (see standard name, 2009 edition of the standard name);
- modified the "scope" (see Chapter 1, Chapter 1 of the 2009 edition);
- the terms "vehicle information" were deleted (see 3.1 of 2009);
- the terms "road vehicle intelligent monitoring and recording system" have been modified (see 3.2, 3.2 of 2009);
- the terms "feature images" have been modified (see 3.3, 3.3 of 2009);
- modified the term "panoramic image" (see 3.4, 3.4 of 2009);
- the term "plate information" was deleted (see 3.5 of 2009);
- modified the term "automatic identification of plates" (see 3.4, 3.6 of 2009);
- the terms "vehicle image capture rate" have been modified (see 3.7, 3.7 of 2009);
- modified the terms "sign recognition accuracy" (see 3.8, 3.8 of 2009);
- modified the "composition" requirement (see 4.1.1, 2009 version 4.1.1);
- Added "nameplate and logo" requirements (see 4.1.3);
- Added "model" requirements (see 4.1.4);
- Added "Passenger vehicle detection" function (see 4.3.1);

- modified the "vehicle image record" function (see 4.3.2, 2009 version 4.3.1);
- modified the "vehicle number plate recognition" function (see 4.3.3.3, 4.3.2)
- Added "vehicle identification" function (see 4.3.4);
- Added "vehicle brand identity identification" function (see 4.3.5);
- Added "body color recognition" function (see 4.3.6);
- "Image and storage requirements" has been removed (see 4.4 of 2009);
- Added "Image Requirements" function (see 4.3.9);
- Added "storage requirements" function (see 4.3.10);
- Removed the "Data transfer and remote maintenance" function (see 4.3.7 of 2009);
- Added "data transfer" function (see 4.3.11);
- Added "running status management" function (see 4.3.12);
- modified the "traffic statistics" function (see 4.3.3, 4.3, 4.3.6);
- Added "Synchrotron" function (see 4.3.15);
- Added "clock synchronization and timing error" function (see 4.3.16);
- Added "motor vehicle identification and comparison" function (see 4.3.17);
- Added "imaging device" requirements (see 4.4);
- modified the "general requirements for inspection" requirements (see 5.2, 2009 version 5.2);
- Increased requirements for "vehicle inspection" (see 5.4.1);
- modified the "vehicle image recording function test" requirements (see 5.4.2, 2009 edition of 5.4.1);
- Added "vehicle identification test" requirements (see 5.4.4);
- increased the "vehicle brand logo identification test" requirements (see 5.4.5);
- Added "body color recognition test" requirement (see 5.4.6);
- Removed the "Image and Storage Check" requirement (see 5.5 for 2009);
- Added "image inspection" requirement (see 5.4.9);
- increased the requirement for "storage inspection" (see 5.4.10);
- Removed the "Data Transfer and Remote Maintenance Function Check" requirements (see 5.4.7 of 2009);

- Added "Data transfer function check" (see 5.4.11);
- Added "run status management function check" (see 5.4.12);
- modified the "flow statistics function check" (see 5.4.4, 2009 edition of 5.4.6);
- Added "synchronization fill function test" requirement (see 5.4.15);
- Added "clock synchronization and timing error check" requirements (see 5.4.16);
- increased the "motor vehicle electronic identification read and match" requirements (see 5.4.17);
- Added "imaging device test" requirements (see 5.5);
- modified the "outcome determination" requirement (see 6.2.3), 6.2.3) Amend the requirements of Appendix A (see Appendix A, Appendix A of the 2009 edition).

This standard is proposed by the Traffic Management Science Research Institute of the Ministry of Public Security.

This standard by the Ministry of Public Security Road Traffic Management Standardization Technical Committee.

The drafting unit. the Ministry of Public Security Traffic Management Science Research Institute, the National Road Traffic Safety Product Quality Supervision and Inspection Center, Harbin New in the new electronic co., Ltd.

1 Scope

This standard specifies the technical requirements, test methods, inspection rules, installation and operating conditions of the intelligent monitoring and recording system for road vehicles.

Chi, labels, packaging and so on.

This standard applies to the road vehicle intelligent monitoring and recording system production, testing.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 2423.1 Environmental testing for electric and electronic products - Part 2. Test methods - Test A. Low temperature GB/T 2423.2 Environmental testing for electric and electronic products - Part 2. Test methods - Test B. High temperature GB/T 2423.3 Environmental testing for electric and electronic products - Part 2. Test methods - Test Cab.

constant damp heat test GB/T 2423.5 Environmental testing for electric and electronic products - Part 2. Test methods - Test Ea and Guidance. Impact GB/T 2423.10 Environmental testing for electric and electronic products - Part 2. Test methods - Test Fc. Vibration (sinusoidal) GB/T 2423.17 Environmental testing for electric and electronic products - Part 2. Test methods Test Ka. Salt mist GB/T 2423.37 Environmental testing for electric and electronic products - Part 2. Test methods - Test L. Dust test Electromagnetic compatibility - Test and measurement techniques - Electrostatic discharge immunity test GB/T GB/T 17626.4 Electromagnetic compatibility test and measurement techniques Electrical fast transient burst immunity test GB/T 17626.5 Electromagnetic compatibility test and measurement technology Surge (impact) immunity test GB/T 17626.11 Electromagnetic compatibility test and measurement techniques Immunity test for voltage sags, short interruptions and voltage variations GB/T 21255 motor vehicle speedometer Technical specification for civil closed - circuit surveillance television system GB/T 50198 Code for construction and acceptance of earthing installations for electrical installations installation engineering GB 50619 License plate of the People 's Republic of China Technical specification for image forensics of road traffic safety violation of GA/T 832 Technical specification for automatic recognition of image feature of motor vehicle General technical specification for light - emitting devices for traffic control and imaging Environmental testing methods for military equipment laboratories GJB150.8A Part 8. Rain test ISO/IEC 15444.:1994 Information technology - JPG1994 Image coding system (Informationtechnology-JPEG 1994imagecodingsystem)

3 Terms and definitions

The following terms and definitions apply to this document.

Intelligent monitoring and recording system for road vehicles

intelligentmonitoringandrecordingsystemforvehiclesonroads Bayonet monitoring system A system for automatic acquisition and processing of vehicle information through a monitoring point.