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

JT/T 1076-2016

**GNSS System for Operating Vehicles - Technical Specifications
for Vehicle Video Terminal**

道路运输车辆卫星定位系统 车载视频终端技术要求 清晰版
(English Translation)

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Foreword

This Standard was drafted in accordance with the rules in GB/T 1.1-2009.

This Standard was proposed by and shall be under the jurisdiction of National Technical Committee on Transportation Information Communication and Navigation of Standardization Administration of China.

The drafting organizations of this Standard. China Transport Telecommunications & Information Center, China Transport Infocom Technologies Co., Ltd., Shenzhen Streamax Technology Co., Ltd., Zhejiang DAHUA Technology Co., Ltd., Shenzhen RESON Tech Co., Ltd., Dalian Dalian DingShi Technology Co., Ltd., Jiangsu TransVisum Technology Co., Ltd., Hangzhou HIKVISION Digital Technology Co., Ltd., Shenzhen DONYUN Technology INC., Jiangsu DUVONN Electronic Technology Co., Ltd., Jilin HUANQI Science and Technology Co., Ltd.

1 Scope

This Standard specifies the general requirements, functional requirements, performance requirements, installation requirements and test methods of vehicle video terminal of GNSS system for operating vehicles.

This Standard is applicable to the design, manufacture, inspection and installation of

main engine, camera and other external equipment of vehicle video terminal of GNSS system for operating vehicles.

2 Normative References

The following documents are indispensable to the application of this Standard. In terms of references with a specified date, only versions with a specified date are applicable to this Standard. The latest version (including all the modifications) of references without a specified date is applicable to this Standard.

GB/T 2423.5 Environmental Testing for Electric and Electronic Products - Part 2.

Test Methods - Test Ea and Guidance. Shock

GB/T 2423.10 Environmental Testing for Electric and Electronic Products - Part 2.

Test Methods - Test Fc and Guidance. Vibration (Sinusoidal)

GB/T 15865 Video Cameras (PAL/SECAM/NTSC) - Methods of Measurement -

Part 1.Non-broadcast Single-sensor Cameras

GB/T 19056-2012 Vehicle Travelling Data Recorder

GB/T 20090.2 Information Technology - Advanced Coding of Audio and Video -

Part 2.Video

GB 20815-2006 Digital Video Record Equipment of Video Surveillance System in

Security & Protection Systems

GB/T 25724 Technical Specifications for Surveillance Video and Audio Coding for

Public Security

GJB 367A General Specifications for Military Communication Equipment

3.1 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1.1 Vehicle video terminal

Vehicle video terminal refers to a vehicle-mounted terminal, which is installed on a vehicle to be in charge of the collection of audio and video information of vehicle environment; it is also equipped with the function of satellite positioning.

3.1.4 Particular alarm

Particular alarm refers to specific alarm that would affect vehicle safety, such as emergency alarm and collision rollover alarm, etc.

3.2 Abbreviations

The following abbreviations are applicable to this document.

4.1 Basic Requirements

The appearance, nameplate, characters, graphs, symbols, texture and case protection of the terminal shall comply with the stipulation in 4.2 ~ 4.6 in JT/T 794-2011.

4.2.1 Main engine

Main engine shall comply with the stipulation in 4.1.1 in JT/T 794-2011; it shall also include the following modules or interfaces.

4.2.2 External equipment

External equipment shall comply with the stipulation in 4.1.2 in JT/T 794-2011; it shall also include the following devices.

5.4.8 and 5.4.9 in JT/T 794-2011; specifically speaking, the mode of communication

should also support TD-LTE or FDD-LTE, etc.

5.2.1 Audio and video signal compression mode

The adopted audio and video signal compression mode shall be clearly indicated in product's technical documents. The mode of audio and video digital signal compression shall satisfy the following requirements.

5.2.3 Requirements of recorded image quality

Image resolution (pixel) shall at least be 704 x 576 (D1). One route shall adopt 1,280 x 720 (720P) or above; horizontal resolution shall be more than or equals to 400 TVL.

5.2.5 Requirements of total resources of video recording

Under the circumstance when all cameras and one route pickup that the equipment practically supports are initiated for recording, the vehicle-mounted terminal shall have the capability of at least 150 h of video recording. In addition, the image playback shall comply with the stipulation in 5.2.4.1 and 5.2.4.2.

5.2.7 Requirements of video-recording mode

The terminal shall adopt the boot video-recording mode; after the vehicle stops and reaches the delay time, the video-recording shall automatically stop. The delay time shall be settable. When the terminal is in the state of dormancy, it shall be able to report the position merely in accordance with the set parameters and without initiating the video-recording function. However, it shall support three video-recording triggering modes, namely, particular alarm trigger, timing trigger and manual trigger.

5.3.1 Search

The terminal shall have the function of searching audio and video information in accordance with date, channel number and alarm type, etc.

5.5.1 Data coverage

It shall support the function of automatic video coverage. When the storage device reaches its maximum capacity, the oldest video data shall be automatically covered. When users are reminded to deal with video data with the marking of particular alarm, and such data is not deleted, the data shall be covered if necessary.

5.6.1 Basic requirements

The system shall satisfy all the functional requirements regarding surveillance center in JT/T 794-2011.

5.6.2 Video surveillance

The system shall support at least the simultaneous uploading of real-time video images of any two channels. Under the condition of 200 kbps of bandwidth, when the