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

GA/T 2103.1-2023

**Graphic comparison application of easy-to-manufacture guns -
Part 1: General technical requirements**

易制枪物品图形比对应用 第1部分：总体技术要求

(English Translation)

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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 is part 1 of GA/T 2103 Application of Graphic Comparison of Articles Easily Made into Guns: GA/T 2103 has been published in the following parts:

--- Part 1: General technical requirements;

--- Part 2: Data items;

--- Part 3: Interface specification:

Introduction

In order to strengthen the control of firearms and ammunition, effectively maintain social security and order, and strictly prevent the illegal acquisition and use of firearms and their parts and components from causing harm, the public security agency organized relevant units to develop an intelligent analysis application for guns and their parts, namely an image comparison application for easy-to-make guns:

Using technologies such as image analysis, image comparison, artificial intelligence, and deep learning, we can automatically identify guns and their parts that have passed security inspections, and other items that are easy to make guns:

And effectively solve the problem of identification and early warning of guns and their components:

In view of this, GA/T 1399 (all parts), GA/T 1400 (all parts) and other standards for video image comparison and recognition, service management standards Based on the standard, combined with the business management needs of easy-to-make gun items, according to the requirements of easy-to-make gun graphics comparison application edge computing unit and application deployment this document was prepared:

Considering that GA/T 2103 includes application composition, edge computing unit, analysis unit, service platform, application performance, application deployment framework,

the content of the standard is too long, and different contents are aimed at different users: In order to improve the use of the standard Solution efficiency, GA/T 2103 is proposed to consist of three parts:

--- Part 1: General technical requirements: The purpose is to clarify the definition, function, performance and deployment of the image comparison application of easy-to-make gun items Requirements to be followed by the architecture, etc.;

--- Part 2: Data items: The purpose is to clarify the data items that need to be exchanged and shared when the image comparison application of easy-to-make gun items provides services:

Requests;

--- Part 3: Interface specification: The purpose is to clarify the exchange and sharing of data when the image comparison application of easy-to-make gun items provides services Interface requirements:

This document defines the concept and composition of the easy-to-make gun item pattern comparison application, and defines the module indicators and deployment locations for implementing the application:

Standardization has been made to solve the problems of what to build, how to build, and where to build during application construction:

Application of graphic comparison of items that are easy to make guns Part 1: General technical requirements

1 Scope

This document specifies the composition, edge computing unit, analysis unit, service platform, application performance, and application Use technical requirements such as deployment architecture and deployment requirements:

This document applies to the design, development, and deployment of graphic comparison applications for firearm-producible items:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

GB 15208.2-2018 Micro-dose X-ray security inspection equipment Part 2: Transmission

baggage security inspection equipment GB 15208.3-2018 Micro-dose X-ray security inspection equipment Part 3: Transmission cargo security inspection equipment GB/T 28181-2022 Technical requirements for information transmission, exchange and control of public security video surveillance network systems GB 50348-2018 Technical Standard for Security Engineering GA/T 1399.1-2017 Public Security Video Image Analysis System Part 1: General Technical Requirements GA/T 1400.3-2017 Public Security Video Image Information Application System Part 3: Database Technical Requirements GA/T 1400.4 Public Security Video Image Information Application System Part 4: Interface Protocol Requirements GA/T 1788.3 Security Technical Requirements for Public Security Video Image Information Systems Part 3: Security Interaction GA/T 2103.2-2023 Application of graphic comparison of items that can be easily made into guns Part 2: Data items GA/T 2103.3-2023 Application of graphic comparison of items that can be easily made into guns Part 3: Interface specification YZ/T 0177-2021 Technical requirements for intelligent X-ray security inspection equipment for mail and express delivery

3 Terms, definitions and abbreviations

3.1

Terms and Definitions the terms and definitions defined in GB 15208.2-2018 and GB 15208.3-2018 and the following apply to this document:

3.1.1

Easy-to-manufacture gun Articles that can be easily made into firearms and their specialized parts:

Note: This includes firearms, ammunition, gun-shaped objects, bullet-shaped objects, and items such as the gun's barrel, magazine, sleeve, receiver, grip, recoil spring, hammer, trigger, and stock:

3.1.2

edge computing unit edge computing unit Performs computational tasks such as converting X-ray image encoding into X-ray video streams, video network adaptation, model calculation, and calculation result transmission End operation module: