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INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GA 787-2008

Technical specifications for fingerprint and palmprint image data

指纹图像数据转换的技术条件

(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 of Standardization Documents" drafted.

This document replaces GA 787-2010 "Technical Conditions for Fingerprint Image Data Conversion" and GA 789-2008 "Palmprint Image Data Conversion" technical conditions". Compared with GA 787-2010 and GA 789-2008, the main technical changes are as follows.

--- Changed the source of on-site fingerprint image (see 4.2, 4.2 of GA 787-2010 edition);

--- Added "plane full palm pattern" (see 5.1);

--- Changed the source of the palm print image (see 5.2, 4.2 of GA 789-2008 edition).

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This document is under the jurisdiction of the Criminal Information Sub-Technical Committee (SAC/TC179/SC2) of the National Criminal Technology Standardization Technical Committee.

1 Scope

This document specifies the source, size and representation format of palmprint image data.

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This document is applicable to the palmprint image data of the automatic identification system of the public security organs.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GA/T 773 Terms for Automatic Fingerprint Identification System

3 Terms and Definitions

Terms and definitions defined in GA/T 773 apply to this document.

4 Fingerprint Image Sources

4.1
The source of the fingerprint image is black ink fingerprints or fingerprint images obtained with living body collection instruments, including three-sided fingerprints, flat fingerprints, Flat right four fingers, flat left four fingers and flat left and right thumb fingerprints.

4.2
The source of the on-site fingerprint image is the image extracted by photographic extraction, tape extraction, physical extraction and other methods.

5 Palmprint Image Sources

5.1
The source of the palm print image source is black ink palm print or palm print image obtained with a living body collection instrument, including. planar full palm print, planar palm print and outer palm lines. The plane palm pattern adopts the plane stamping; the outer palm print adopts the 45° plane stamping.

5.2
The source of the palmprint image on site is the image extracted by photographic extraction, tape extraction, physical extraction and other methods.

6 Fingerprint image grayscale data

The gray level of each pixel of the uncompressed palmprint image is quantized into 256 levels, represented by an unsigned 8-bit byte. black the pixel gray value is 0, and the white pixel gray value is 255.

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7 Fingerprint Image Resolution

7.1

The resolution unit of palmprint image is dots per inch (abbreviated as dpi).

7.2

The resolution of the palmprint image is 500dpi, and the allowable error is within ±1%.

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