# INTERNATIONAL **STANDARD**

ISO/IEC 10918-5

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## Information technology — Digital compression and coding of continuoustone still images: JPEG File Interchange Format (JFIF)

les L es fixes Technologies de l'information — Compression numérique et codage des images fixes à modelé continu: Format d'échange de fichiers JPEG





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### **Foreword**

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 10918-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*, in collaboration with ITU-T. The identical text is published as Rec. ITU-T T.871 (05/2011).

ISO/IEC 10918 consists of the following parts, under the general title *Information technology — Digital compression and coding of continuous-tone still images*:

- Part 1: Requirements and guidelines
- Part 2: Compliance testing
- Part 3: Extensions
- Part 4: Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types and Registration Authorities (REGAUT)
- Part 5: JPEG File Interchange Format (JFIF)
- Part 6: Application to printing systems

### ISO/IEC 10918-5:2013(E)

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# INTERNATIONAL STANDARD RECOMMENDATION ITU-T

# Information technology – Digital compression and coding of continuous-tone still images: JPEG File Interchange Format (JFIF)

### 1 Scope

This Recommendation | International Standard specifies the JPEG File Interchange Format (JFIF).

The JPEG File Interchange Format (JFIF) is a minimal file format which enables the exchange of JPEG encoded images (according to Rec. ITU-T T.81 | ISO/IEC 10918-1) having 1 or 3 colour channels and 8 bits per colour channel between a wide variety of platforms and applications. This minimal format does not include some advanced features found in various other specified file formats. The purpose of this format is to provide for a basic form of exchange of JPEG images. The optional inclusion of thumbnail images for rapid browsing is also supported.

### 2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

### 2.1 Identical Recommendations | International Standards

- Recommendation ITU-T T.81 (1992) | ISO/IEC 10918-1:1994, Information technology - Digital compression and coding of continuous-tone still images - Requirements and guidelines.

### 2.2 Paired Recommendations | International Standards equivalent in technical content

None.

### 2.3 Additional references

- Recommendation ITU-R BT.601-6 (2007), Studio encoding parameters of digital television for standard 4:3 and wide screen 16:9 aspect ratios.

### 3 Definitions

For the purposes of this Recommendation | International Standard, the following definitions apply.

- **3.1 JPEG File Interchange Format (JFIF)**: The interchange format specified in this Recommendation International Standard for exchange of images encoded according to the JPEG standard (Rec. ITU-T T.81 ISO/IEC 10918-1) having 1 or 3 colour channels and 8 bits per colour channel.
- **3.2 thumbnail**: Reduced resolution representation of the main JPEG (Rec. ITU-T T.81 | ISO/IEC 10918-1) coded image that can be used to identify the image by its content.

NOTE – Thumbnails are commonly used to browse multiple images quickly using a low resolution visual representation of the images, rather than using file names or other metadata.

### 4 Abbreviations

For the purposes of this Recommendation | International Standard, the following abbreviations apply.

Ap<sub>i</sub> Byte i of application data

APP<sub>0</sub> Application data marker, type 0