

CCS N 04



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

GB/T 20733-2022

Digital camera - Vocabulary

Issued on: March 9, 2022

Implemented on: October 1, 2022

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

foreword

34 terms are added (see 3.6);

5.10 of the

1 Scope

2 Normative references

3 Terms and Definitions

3.1 Digital cameras and devices

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 GB/T 20733-2006 "Digital Camera Terminology", and the main technical changes compared with GB/T 20733-2006

as follows.

--- Added 152 terms and definitions, of which 35 terms were added for "digital cameras and devices" (see 3.1), "photography light"

17 terms were added for "science" (see 3.2), 17 terms were added for "exposure and photoelectric conversion" (see 3.3), "image

31 items related to "evaluation" (see 3.4), 18 items related to "color control" (see 3.5), "data processing" related terms

34 terms are added (see 3.6);

--- Modified the definitions of the following terms. "digital (code) camera" (see 3.1.3, 3.3 of the.2006 edition), "pixel aspect ratio" (see

3.1.14, 3.13 of the.2006 edition), "soft stray light" (see 3.2.9, 3.25 of the.2006 edition), "photoelectric transfer function of the camera"

(see 3.3.1.1, 4.2 of the.2006 edition), "digital output level" (see 3.3.2, 4.4 of the.2006 edition), "total noise" (see

3.3.5.1, 4.8 of the.2006 edition), "fixed pattern noise" (see 3.3.5.2, 4.9 of the.2006 edition),

"random noise" (see

3.3.5.3, 4.10 of the.2006 edition), "minimum exposure limit" (see 3.3.10, 4.15 of the.2006 edition), "brightness ratio (see 3.3.14,

4.19 of the.2006 edition), "Scene Brightness Ratio" (see 3.3.15, 4.20 of the.2006 edition), "ISO Digital Camera Dynamic Range" (see

3.3.22, 4.27 of the.2006 edition), "resolution" (see 3.4.1, 5.1 of the.2006 edition), "cycles per mm" (see 3.4.6,

5.6 of the.2006 edition), "Test chart" (see 3.4.14, 5.14 of the.2006 edition), "Grayscale chart" (see 3.4.16, of the.2006 edition

5.16), spectral neutrality" (see 3.4.23, 5.23 of the.2006 edition), "effective spectral neutrality" (see 3.4.24,.2006 edition of the

5.24), "Sampling spacing" (see 3.4.27, 5.27 of the.2006 edition), "Sampling imaging system" (see 3.4.28,.2006 edition of the

5.28), "Sampling aspect ratio" (see 3.4.29, 5.29 of the.2006 edition), "Nyquist frequency limit" (see 3.4.59,.2006 edition

5.10 of the

"Original Correlation Color Coding" (see 3.5.13.1, 6.14 of the.2006 edition), "Luminance factor" (see 3.5.25,.2006 edition of

6.26), "color space white point" (see 3.5.28, 6.29 of the.2006 edition), "non-linear correction" (see 3.5.29, 6.30 of the.2006 edition),

"ICC Color Profile" (see 3.5.32, 7.6 of the.2006 edition), "Signal processing" (see 3.6.1, 7.1 of the.2006 edition), "Phase

Computer File System Design Rules" (see 3.6.4, 7.4 of the.2006 edition), "Image Storage Application File" (see 3.6.5,.2006 edition

7.5), "JPEG format" (see 3.6.7, 7.7 of the.2006 edition), "Exif/JPEG format" (see 3.6.9,.2006 edition of the

7.9), "Digital Print Command Format" (see 3.6.10, 7.10 of the.2006 edition), "scene" scene(1) (see 3.6.14,.2006

version 7.14), "scene" scene(2) (see 3.6.15, 7.14 of the.2006 edition), "scene related image data" (see 3.6.17,

7.15 of the.2006 edition), "Original Relevant Image State" (see 3.6.20, 7.18 of the.2006 edition), "Image Compression" (see

3.6.23.1, 7.21 of the.2006 edition).

This document is drafted with reference to ISO 12231-1:2020 "Terminology for photographic electronic imaging - Part 1. Supplementary vocabulary", the degree of consistency is not

Equivalent.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document defines the technical requirements for digital cameras, test methods, and terms and definitions related to the use of digital cameras.

This document is applicable to standard setting, document preparation, teaching material writing, book editing and document translation related to digital cameras.

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.

GB/T 19953-2005 Measurement of resolution of digital cameras

Determination of GB/T 20224 Digital Camera Exposure Index, ISO Sensitivity Value, Standard Output Sensitivity and Recommended Exposure Index

ISO 12234-2 Electronic Still Image Imaging Removable Memory Part 2. TIFF/EP Image Data Format

(Electronic still picture imaging-Removable memory-Part 2. TIFF/EP image data format)

imaging-Noise measurements)

photographic images)

lines)

IEC 61146-1 Methods of measurement for cameras (PAL/SECAM/NTSC) Part 1. Non-broadcast single-sensor cameras

sensor cameras)

IEC 61966-2-1 Color measurement and management of multimedia systems and equipment Part 2-1. Color management default RGB color space

management-DefaultRGB colourspace-sRGB)

3.1 Digital cameras and devices

3.1.1

A system that converts the exposure on the focal plane or the spatial distribution of scene brightness (scene) into digital information.

[Source. ISO 14524.2009, 3.12]