### TECHNICAL REPORT

### ISO/TR 12231-2

First edition 2022-05

## Photography — Electronic still picture imaging terminology —

## Part 2: **Other defined terms**

Photographie — Terminologie de l'imagerie de prises de vue électroniques —

Partie 2: Autres termes définis

ISO/TR 12231-2:2022

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 42, Photography.

This first edition of ISO/TR 12231-2 together with ISO 12231-1:2020 cancels and replaces ISO 12231:2012, which has been technically revised. The main changes are as follows:

All terms defined in publications maintained by ISO/TC 42 WG 18, WG 20, WG 23 and WG 25 are listed in this document, with the publication containing the definition indicated. Terms that are not defined in other WG 18, WG 20 WG 23, and WG 25 publications are defined in ISO 12231-1:2020.

A list of all parts in the ISO 12231 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

Electronic still picture imaging concepts are drawn from traditional photography, electronics, video, and information technology. In some cases, the concepts are redefined to apply to electronic still picture imaging. For example, unlike traditional photography, measurements cannot be defined in terms of "film" or "sensitised material", since images acquired by digital image capture devices are stored electronically and are not immediately exposed on film. The meaning of shutter and exposure time is also different for digital image capture devices, because an electronic imaging sensor typically has image acquisition characteristics that are different from those of film.

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## Photography — Electronic still picture imaging terminology —

### Part 2:

### Other defined terms

### 1 Scope

This document provides a list of terms defined in other ISO/TC 42 International Standards, Technical Specifications and Technical Reports relevant to electronic still picture imaging.

This document is intended to be used in conjunction with the definition sources listed.

#### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions ANDARD PREVIEW

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

### 4 Terms defined in other ISO/TC 42 International Standards, Technical Specifications and Technical Reports

<u>Table 1</u> gives a list of terms defined in other ISO/TC 42 International Standards, Technical Specifications and Technical Reports, and their sources.

Term	Source of definition
35 mm film equivalent focal length	ISO 19093:2018, 3.3
	ISO 20954-1:2019, 3.7
absolute colorimetric coordinates	ISO/TR 17321-2:2012, 2.1
	ISO 22028-1:2016, 3.1
actual image height	ISO 17850:2015, 3.2.2
adapted white	ISO/TR 17321-2:2012, 2.2
	ISO 22028-1:2016, 3.2
	ISO 22028-2:2013, 3.1
	ISO/TS 22028-3:2012, 3.1

ISO/TS 22028-4:2012, 3.1

Table 1 — List of terms and sources

 Table 1 (continued)

Term	Source of definition
additive RGB colour space	ISO 22028-1:2016, 3.3
	ISO 22028-2:2013, 3.2
	ISO/TS 22028-3:2012, 3.2
	ISO/TS 22028-4:2012, 3.2
addressable photoelements	ISO 12233:2017, 3.1
	ISO 16067-1:2003, 3.1
	ISO 16067-2:2004, 3.1
	ISO 21550:2004, 3.1
adopted white	ISO 17321-1:2012, 3.1
	ISO/TR 17321-2:2012, 2.3
	ISO 22028-1:2016, 3.4
	ISO/TS 22028-3:2012, 3.3
album	ISO 15740:2013, 3.1
aliasing	ISO 12233:2017, 3.2
	ISO 16067-1:2003, 3.2
Tab CTAND	ISO 16067-2:2004, 3.2
aliasing ratio	ISO 12231:2020, 3.1
application (standa	ISO 12231:2020, 3.2
artefactual attribute	ISO 20462-1:2005, 3.1
IGO (TP)	ISO 20462-3:2012, 3.1
association	ISO 15740:2013, 3.2
attribute https://standards.iten.arcatalog/standards/sis	ISO 20462-1:2005, 3.2
122	ISO 20462-3:2012, 3.2
attribute just noticeable difference attribute JND	ISO 20462-1:2005, 3.3
average vibration angle	ISO 20954-1:2019, 3.6
bi-tonal pattern/bitonal patterns	ISO 12233:2017, 3.27.1
	ISO 16067-2:2004, 3.21.1
	ISO 21550:2004, 3.26.1
camera opto-electronic conversion function	ISO 14524:2009, 3.1
camera OECF	ISO 15739:2017, 3.1
capture point	ISO 15781:2019, 3.8
categorical sort method	ISO 20462-1:2005, 3.4
	ISO 20462-2:2005, 2.5
chromatic displacement	ISO 19084:2015, 2.1
clipping value	ISO 15739:2017, 3.2
colorimetric colour space	ISO 22028-1:2016, 3.5
	ISO 22028-2:2013, 3.3
	ISO/TS 22028-3:2012, 3.4
	ISO/TS 22028-4:2012, 3.3

 Table 1 (continued)

Term	Source of definition
colour component transfer function	ISO/TR 17321-2:2012, 2.5
CCTF	ISO 22028-1:2016, 3.6
	ISO 22028-2:2013, 3.4
	ISO/TS 22028-3:2012, 3.5
	ISO/TS 22028-4:2012, 3.4
colour-difference-sensitive wavelength	ISO/TR 17321-5:2021, 3.1
colour encoding	ISO 22028-1:2016, 3.7
	ISO 22028-2:2013, 3.5
	ISO/TS 22028-3:2012, 3.6
	ISO/TS 22028-4:2012, 3.5
colour gamut	ISO/TR 17321-2:2012, 2.6
	ISO 22028-1:2016, 3.8
	ISO 22028-2:2013, 3.6
	ISO/TS 22028-3:2012, 3.7
	ISO/TS 22028-4:2012, 3.6
colour image encoding	ISO 22028-1:2016, 3.9
THE STANDAR	ISO 22028-2:2013, 3.7
(standards	ISO/TS 22028-3:2012, 3.8
(Statitudi as)	ISO/TS 22028-4:2012, 3.7
colour matching functions	ISO/TR 17321-2:2012, 2.7
https://standards.iteh.ai/catalog/standards/sist/45a75	ISO/TS 17321-4:2016, 3.1
12231-2-20	ISO/TR 17321-5:2021, 3.2
	ISO 22028-1:2016, 3.10
colour pixel reconstruction	ISO/TR 17321-2:2012, 2.8
colour rendering	ISO/TR 17321-2:2012, 2.9
	ISO 22028-1:2016, 3.11
	ISO 22028-2:2013, 3.8
	ISO/TS 22028-3:2012, 3.9
	ISO/TS 22028-4:2012, 3.8
colour rendering index	ISO 3664:2009, 3.2
	ISO/TS 17321-4:2016, 3.2
colour re-rendering	ISO 22028-1:2016, 3.12
colour sequential exposure	ISO 12231-1,2020, 3.3
colour shading	ISO 17957:2015, 3.2
colour non-uniformity colour space	ISO/TR 17321-2:2012, 2.10
colour space	ISO 22028-1:2016, 3.13
	ISO 22028-2:2013, 3.9
	ISO/TS 22028-3:2012, 3.10
	ISO/TS 22028-4:2012, 3.9

 Table 1 (continued)

Term	Source of definition
colour space encoding	ISO 22028-1:2016, 3.14
	ISO 22028-2:2013, 3.10
	ISO/TS 22028-3:2012, 3.11
	ISO/TS 22028-4:2012, 3.10
colour space white point	ISO 22028-1:2016, 3.15
	ISO 22028-2:2013, 3.11
	ISO/TS 22028-3:2012, 3.14
	ISO/TS 22028-4:2012, 3.11
connection	ISO 15740:2013, 3.3
continuous colour space values	ISO 22028-1:2016, 3.16
	ISO 22028-2:2013, 3.12
corresponding colorimetry	ISO/TR 17321-2:2012, 2.11
cycles per millimetre cy/mm	ISO 12233:2017, 3.3
data object	ISO 15740:2013, 3.5
datacode	ISO 15740:2013, 3.4
dataset iTeh STAND	ISO 15740:2013, 3.6
design rule for camera filesystem DCF Cstanda	ISO 15740:2013, 3.7
device discovery	ISO 15740:2013, 3.8
device-dependent colour space	ISO 22028-1:2016, 3.17
digital imaging system	ISO 22028-1:2016, 3.18
digital output level digital code value	ISO 14524:2009, 3.2
digital code value	ISO 16067-1:2003, 3.3
	ISO 16067-2:2004, 3.3
	ISO 21550:2004, 3.3
digital print order format DPOF	ISO 15740:2013, 3.10
digital reference stimuli DRS	ISO 20462-3:2012, 3.3
digital still camera	ISO 12232:2019, 3.1
DSC	ISO 15739:2017, 3.3
	ISO 15781:2019, 3.1
	ISO 17321-1:2012, 3.2
	ISO/TR 17321-2:2012, 2.12
	ISO/TS 17321-4:2016, 3.3
	ISO/TR 17321-5:2021, 3.3
digital still photography device DSPD	ISO 15740:2013, 3.9
DSC dynamic range	ISO 15739:2017, 3.8
DSC image signal	ISO 12232:2019, 3.2

 Table 1 (continued)

Term	Source of definition
edge spread function	ISO 12233:2017, 3.4
ESF	ISO 16067-1:2003, 3.4
	ISO 16067-2:2004, 3.4
	ISO 21550:2004, 3.4
edge-based spatial frequency response e-SFR	ISO 12233:2017, 3.24.1
effective time	ISO 516:2019, 3.3
effectively spectrally neutral	ISO 12233:2017, 3.5
	ISO 16067-1:2003, 3.5
	ISO 16067-2:2004, 3.5
	ISO 21550:2004, 3.5
electromechanical shutter	ISO 14524:2009, 3.3
electronic scanner for photographic films	ISO 16067-2:2004, 3.6
	ISO 21550:2004, 3.6
electronic scanner for photographic prints	ISO 16067-1:2003, 3.6
electronic still-picture camera	ISO 12233:2017, 3.6
iTeh STANDARI	ISO 14524:2009, 3.4
enumeration	ISO 15740:2013, 3.11
Exif (Standards,	ISO 12234-3:2016, 3.1
Exif/JPEG	ISO 15740:2013, 3.12
exposure index EI ISO/TR 12231-	ISO 12232:2019, 3.3
exposure process	ISO 12231-1:2020, 3.4
exposure saturation	ISO 12232:2019, 3.4
exposure series	ISO 12232:2019, 3.5
exposure time	ISO 516:2019, 3.4
	ISO 15739:2017, 3.12
extended gamut	ISO 22028-1:2016, 3.19
	ISO 22028-2:2013, 3.13
	ISO/TS 22028-4:2012, 3.12
factory shipping conditions factory shipping settings factory shipping values factory shipping mode	ISO 18383:2015, 3.1
fast scan direction	ISO 16067-1:2003, 3.7
	ISO 16067-2:2004, 3.7
	ISO 21550:2004, 3.7
file system	ISO 12234-1:2012, 3.1
filing system	ISO 12234-2:2001, 3.1
film rendering transform	ISO 22028-1:2016, 3.20
film unrendering transform	ISO 22028-1:2016, 3.21
fixed pattern noise	ISO 15739:2017, 3.9.2
flare	ISO 12231-1:2020, 3.5
FlashPix	ISO 15740:2013, 3.14