**EXIF Tag Reference**

The numbers used in the examples above can be found in the table below.  This table is not intended to be comprehensive – there is *far* too much complexity in the EXIF format for that.  Most manufacturers add their own information in proprietary formats (you can usually decode this, but you need to support each manufacturer separately – Canon camera’s don’t write the Nikon fields), and not all cameras write all fields, and there are non-EXIF storage formats that are used as well (XMP, IPTC, ID3, and more).  If you are looking for comprehensive, I’d recommend [this page](http://www.sno.phy.queensu.ca/%7Ephil/exiftool/TagNames/EXIF.html) on Phil Harvey’s ExifTool site; otherwise, here’s a list of the most common, relatively standard ones. All integers are 32 bits in length, except those with the notation ‘short’; they are 16 bits in length. Integer rationals are stored XY, where the value is equal to X/Y; most are 64 bits in length (two 32 bit integers back-to-back).

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| --- | --- | --- | --- | --- |
| Decimal Value | Hex Value | Data Type | Tag Name | Notes |
| 271 | 0x010f | ASCII string | Equipment Maker | ‘Canon’, ‘Nikon’, etc. |
| 272 | 0×0110 | ASCII string | Equipment Model | ‘Canon PowerShot S5 IS’, etc. |
| 274 | 0×0112 | integer (unsigned short) | Orientation | 1 = Horizontal 3 = Rotate 180 degrees 6 = Rotate 90 degrees clockwise 8 = Rotate 270 degrees clockwise |
| 282 | 0x011a | integer (unsigned short) | X Resolution | Unit in Resolution Unit field (for pixels, see Pixel X Dimension field) |
| 283 | 0x011b | integer (unsigned short) | Y Resolution | Unit in Resolution Unit field (for pixels, see Pixel Y Dimension field) |
| 296 | 0×0128 | integer (unsigned short) | Resolution Unit | 1 = None 2 = Inches 3 = Centimetres |
| 306 | 0×0132 | ASCII string | Modified Date Time | YYYY:MM:DD HH:MM:SS |
| 33434 | 0x829a | integer rational (unsigned) | Exposure Time | First integer divided by the second integer produces the exposure time in seconds; for example, a value of ’1′ followed by a value of ’50′ is an exposure time of 1/50th of a second. |
| 33437 | 0x829d | integer rational (unsigned) | F Number | First integer divided by the second integer produces the F number; for example, a value of ’35′ followed by a value of ’10′ is F/3.5. |
| 34855 | 0×8827 | integer (unsigned short) | ISO Speed | 100, 200, 400, etc. |
| 36867 | 0×9003 | ASCII string | Date Taken | YYYY:MM:DD HH:MM:SS |
| 36868 | 0×9004 | ASCII string | Date Created | YYYY:MM:DD HH:MM:SS |
| 37377 | 0×9201 | integer rational (signed) | Shutter Speed |  |
| 37378 | 0×9202 | integer rational (unsigned) | Aperture |  |
| 37380 | 0×9204 | integer rational (signed) | Exposure Compensation | First integer divided by the second integer produces the exposure compensation; for example, a value of ’2′ followed by a value of ’3′ is +2/3 |
| 37381 | 0×9205 | integer rational (unsigned) | Maximum Aperature |  |
| 37383 | 0×9207 | integer (unsigned short) | Metering Mode | 0 = Unknown 1 = Average 2 = Center-weighted average 3 = Spot 4 = Multi-spot 5 = Multi-segment 6 = Partial 255 = Unknown |
| 37385 | 0×9209 | integer (unsigned short) | Flash | 0 = No Flash LSB (8th bit) set = Flash Fired bits 4&5, L-R: 10 = Flash off 01 = Flash on 11 = Flash auto |
| 37386 | 0x920a | integer rational (unsigned) | Focal Length |  |
| 37500 | 0x927c | N/A | Equipment Maker Note | Camera Maker specific information |
| 37510 | 0×9286 | integer (signed) | User Comment |  |
| 40961 | 0xa001 | integer (unsigned short) | Color Space | 1 = sRGB |
| 40962 | 0xa002 | integer (unsigned short) | Pixel X Dimension | In pixels |
| 40963 | 0xa003 | integer (unsigned short) | Pixel Y Dimension | In pixels |
| 41486 | 0xa20e | integer (unsigned short) | Focal Plane X Resolution |  |
| 41487 | 0xa20f | integer (unsigned short) | Focal Plane Y Resolution |  |
| 41488 | 0xa210 | integer (unsigned short) | Focal Plane Resolution Unit | 1 = None 2 = Inches 3 = Centimetres 4 = Millimetres 5 = Micrometres |
| 41495 | 0xa217 | integer (unsigned short) | Sensing Method | 1 = Not defined 2 = One-chip colour area 3 = Two-chip colour area 4 = Three-chip colour area 5 = Colour sequential area 7 = Trilinear 8 = Colour sequential linear |
| 41728 | 0xa300 | integer (signed) | File Source | 1 = Film scanner 2 = Reflection print scanner 3 = Digital camera |
| 41985 | 0xa401 | integer (unsigned short) | Custom Rendered | 0 = Normal 1 = Custom |
| 41986 | 0xa402 | integer (unsigned short) | Exposure Mode | 0 = Auto 1 = Manual 2 = Auto Bracket |
| 41987 | 0xa403 | integer (unsigned short) | White Balance | 0 = Auto 1 = Manual |
| 41988 | 0xa404 | integer rational (unsigned) | Digital Zoom Ratio |  |
| 41989 | 0xa405 | integer (unsigned short) | Focal Length in 35 mm Format |  |
| 41990 | 0xa406 | integer (unsigned short) | Scene Capture Type | 0 = Standard 1 = Landscape 2 = Portrait 3 = Night |
| 41991 | 0xa407 | integer (unsigned short) | Gain Control | 0 = None 1 =Low gain up 2 = High gain up 3 = Low gain down 4 = High gain down |
| 41992 | 0xa408 | integer (unsigned short) | Contrast | 0 = Normal 1 = Low 2 = High |
| 41993 | 0xa409 | integer (unsigned short) | Saturation | 0 = Normal 1 = Low 2 = High |
| 41994 | 0xa40a | integer (unsigned short) | Sharpness | 0 = Normal 1 = Soft 2 = Hard |
| 41996 | 0xa40c | integer (unsigned short) | Subject Distance Range | 0 = Unknown 1 = Macro 2 = Close 3 = Distant |