# DICOM Tags Related Ultrasound Image Search

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| Search Requirement | DICOM Tag | Tag Label | Permissible Values | Reference |
| Modality | 0008, 0060 | Modality | US |  |
| Number of Frames | 0028,0008 | Number of Frames | Positive integer | DICOM Correction Item  ftp://medical.nema.org/medical/**dicom**/final/cp985\_ft.doc |
| B-mode | (0028,0014) | Ultrasound Color Data  Present | This element indicates if any ultrasound  color data is present in an image.  00 = Ultrasound color data not present in  image  01 = Ultrasound color data is present in  image. | Supplement 5  Ultrasound Application Profile, IOD and  Transfer Syntax Extensions  ftp://medical.nema.org/medical/dicom/final/sup05\_ft.pdf |
| Color = Color Doppler (blood flow velocity) | (0008,0008) | Contrast/Bolus Agent | 0001 = 2D Imaging   |  |  |  | | --- | --- | --- | | 0010 = Color Doppler   |  |  | | --- | --- | | 0040 = 3D Rendering   |  | | --- | | 0004 = CW Doppler | | | | DICOM Correction Item  http://medical.nema.org/dicom/cp/CPack-28\_PDF/cp465\_lb.pdf |
| Contrast (this one might be user - -Contrast study) | 0018,0010 | Contrast/Bolus Agent |  | http://www.dabsoft.ch/dicom/3/C.7.6.4/ |
| Spectral Doppler | 0018,604E | Pixel Component Data Type | 0002H =Spectral doppler | DICOM Correction Item  ftp://medical.nema.org/medical/dicom/final/cp465\_ft2.pdf |
| 3D (3D Volume) |  |  | 0040 = 3D Rendering | DICOM Correction Item  ftp://medical.nema.org/medical/dicom/final/cp465\_ft2.pdf |
| Power Doppler | (0008,0008) | Image Type | 0008 = PW Doppler | DICOM Correction Item  http://medical.nema.org/dicom/cp/CPack-28\_PDF/cp465\_lb.pdf |

**C.8.5.6.1.1 Image Type**

For US Images, Image Type [(0008,0008)](http://www.dabsoft.ch/dicom/6/6#%280008,0008%29) is specified to be Type 2. The Defined Terms for Value 3 are:

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| --- | --- | --- |
| ABDOMINAL | BREAST | CHEST |
| ENDOCAVITARY | ENDORECTAL | ENDOVAGINAL |
| EPICARDIAL | FETAL HEART | GYNECOLOGY |
| INTRACARDIAC | INTRAOPERATIVE | INTRAVASCULAR |
| MUSCULOSKELETAL | NEONATAL HEAD | OBSTETRICAL |
| OPHTHALMIC | PEDIATRIC | PELVIC |
| RETROPERITONEAL | SCROTAL | SMALL PARTS |
| TEE | THYROID | TRANSCRANIAL |
| TTE | US BIOPSY | VASCULAR |

Value 4 is constructed as a modality bit map to allow for a description of multi-modality displays. In using this bit map, the sum of the values of the various modalities will unambiguously determine the constituent modalities.

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| 0001 = 2D Imaging | 0002 = M-Mode | 0004 = CW Doppler |
| 0008 = PW Doppler | 0010 = Color Doppler | 0020 = Color M-Mode |
| 0040 = 3D Rendering | 0100 = Color Power Mode | 0200 = Tissue Characterization |

Notes: 1. All Values are hexadecimal encoded as a CS. See [PS 3.5](http://www.dabsoft.ch/dicom/5).

2. For example, Color Flow with CW spectral Doppler would have a value 4 = 0015. Note that no assumption should be made in Color Doppler or Color M-Mode regarding underlying B or M-Mode, respectively.

-- http://www.dabsoft.ch/dicom/3/C.8.5/