ibd file:

external binary uri	Location as an URI where to find the ibd file.
ibd checksum	Checksum is a form of redundancy check, a simple way to protect the integrity of data by detecting errors in data of the ibd file
ibd MD5	MD5 (Message-Digest algorithm 5) is a cryptographic hash function with a 128-bit hash value used to check the integrity of files.
ibd SHA-1	SHA-1 (Secure Hash Algorithm-1) is a cryptographic hash function designed by the National Security Agency (NSA) and published by the NIST as a U. S. government standard. It is also used to verify file integrity.

ibd binary type:

continuous	Way of saving spectra in a imzML binary data file (ibd). The m/z values for all spectra are saved at the beginning of the ibd file. Then the spectral values follow.
preprocessed	Way of saving spectra in a imzML binary data file (ibd). Every spectrum is saved with it's own m/z and intensity values.

ibd identification

universally unique identifier	universally unique identifier is unique throughout the world and allows to doubtlessly identify the ibd file.

ibd offset handle

external array length	Describes how many fields the external data array contains.
external data	Shows that there is no data in the <binary> section of the file but saved in an external file.
external encoded length	Describes the length of the written data stream in byte.
external offset	The position in byte where the data of the data array of a mass spectrum begins.

image:

max count of pixels x	Maximum number of pixels of the x-axis of the image.
max count of pixels y	Maximum number of pixels of the y-axis of the image.
max dimension x	Maximum length of the image in x-axis.
max dimension y	Maximum length of the image in y-axis.
pixel size	Describes the area of the sample presented by one pixel.
image shape	Describes the shape of the image.

spectrum position:

position x	Attribute to describe the position of a spectrum in the direction of the x-axis in the image.
position y	Attribute to describe the position of a spectrum in the direction of the y-axis in the image.

position z	Attribute to describe the position of a spectrum in the direction of the z-axis in the image.
sample stage:	
position accuracy	Accuracy is the degree of conformity of a measured position to its actual value. This value describes how accurate the position of the sample stage can be determined.
step size	Specify the range between two different measuring points on the sample.
target material	Describes the material the target is made of.
linescan sequence:	
bottom up	The starting point is at the bottom of the sample and the sequence of the linescans is in up direction (parallel to the y-axis).
top down	The starting point is at the top of the sample and the sequence of the linescans is in bottom direction (parallel to the y-axis).
left right	The starting point is at the left of the sample and the sequence of the linescans is in right direction (parallel to the x-axis).
right left	The starting point is at the right of the sample and the sequence of the linescans is in left direction. (parallel to the x-axis).
no direction	The linescans are performed randomly on the sample without any sequence.
scan pattern:	
meandering	The scanning happens in non-stop way. As soon as the end of the sample is reached, the scanning direction will be switched and the scanning is continued. There is no new positioning necessary."
one way	The scanning always happens in the same direction. As soon as the end of the sample is reached, the stage is positioned at the starting edge to begin the next run.
random access	The scanning points are randomly chosen and do not follow a pattern.
scan type	
horizontal linescan	The scanning line is a horizontal one.
vertical linescan	The scanning line is a vertical one.
linescan direction	
linescan bottom up	The starting point is at the bottom of the sample and the scanning happens in up direction (parallel to the y-axis).
linescan left right	The starting point is at the left of the sample and the scanning happens in right direction (parallel to the x-axis).
linescan right left	The starting point is at the right of the sample and the scanning happens in left direction. (parallel to the x-axis).
linescan top down	The starting point is at the top of the sample and the scanning happens in bottom direction (parallel to the y-axis).