

# BMP Invoice Image File Format

## Header Structure

Offset (hex)	Field Name	Size (bytes)	Description
0x00	Signature	2	File identifier ("BM" = 0x42, 0x4D)
0x02	File Size	4	Size of the BMP file in bytes
0x06	Reserved	4	Unused, generally set to zero
0x0A	Pixel Data Offset	4	Offset to image data from start of file

## DIB Header (BITMAPINFOHEADER)

Offset	Field Name	Size (bytes)	Description
0x0E	DIB Header Size	4	Header size (usually 40 bytes)
0x12	Width	4	Image width in pixels
0x16	Height	4	Image height in pixels
0x1A	Planes	2	Number of color planes (must be 1)
0x1C	Bits per Pixel	2	Color depth (e.g., 24 for 24-bit color)
0x1E	Compression	4	Compression method being used
0x22	Image Size	4	Size of raw bitmap data
0x26	Horizontal Resolution	4	Horizontal print resolution (pixels/meter)
0x2A	Vertical Resolution	4	Vertical print resolution (pixels/meter)
0x2E	Colors in Palette	4	Number of colors in color palette (0 if unused)
0x32	Important Colors	4	Number of important colors (0 means all)

## Sample Invoice Image BMP File (HEX)

Offset	Sample Value (Hex)	Description
0x00	42 4D	"BM" signature
0x02	72 26 00 00	File size: 9842 bytes
0x06	00 00 00 00	Reserved
0x0A	36 00 00 00	Pixel data offset: 54 bytes
0x0E	28 00 00 00	DIB header size: 40 bytes
0x12	80 02 00 00	Width: 640 pixels
0x16	E0 01 00 00	Height: 480 pixels
0x1A	01 00	1 plane
0x1C	18 00	24 bits per pixel

0x1E	00 00 00 00	No compression
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## Important Notes

- BMP files used for invoices are often uncompressed, resulting in large file sizes.
- BMP format does not support searchable text or metadata – all invoice details are stored as image data.
- This format is not ideal for automated data extraction or archival purposes.
- Always verify that invoice images are legible for record-keeping and compliance.