

Data transfer conversion chart

Mbps, MB/s, Gbps. Factors are given to 7 significant figures; open the converter for full precision and the worked solution.

Conversion factors to bits per second (bit/s)		
UNIT	IN BIT/S	1 BIT/S IN UNIT
bit per second (bit/s)	1 bit/s	1 bit/s
kilobit per second (kbit/s)	1,000 bit/s	0.001 kbit/s
megabit per second (Mbit/s)	1,000,000 bit/s	0.000001 Mbit/s
gigabit per second (Gbit/s)	1,000,000,000 bit/s	1 × 10 ⁻⁹ Gbit/s
byte per second (B/s)	8 bit/s	0.125 B/s
kilobyte per second (kB/s)	8,000 bit/s	0.000125 kB/s
megabyte per second (MB/s)	8,000,000 bit/s	1.25 × 10 ⁻⁷ MB/s
gigabyte per second (GB/s)	8,000,000,000 bit/s	1.25 × 10 ⁻¹⁰ GB/s
mebibyte per second (MiB/s)	8,388,608 bit/s	1.192093 × 10 ⁻⁷ MiB/s

Mbit/s → MB/s	
MBIT/S	MB/S
0.1 Mbit/s	0.0125 MB/s
0.5 Mbit/s	0.0625 MB/s
1 Mbit/s	0.125 MB/s
2 Mbit/s	0.25 MB/s
5 Mbit/s	0.625 MB/s
10 Mbit/s	1.25 MB/s
20 Mbit/s	2.5 MB/s
25 Mbit/s	3.125 MB/s
50 Mbit/s	6.25 MB/s
100 Mbit/s	12.5 MB/s
250 Mbit/s	31.25 MB/s
500 Mbit/s	62.5 MB/s
1,000 Mbit/s	125 MB/s

MB/s → Mbit/s	
MB/S	MBIT/S
0.1 MB/s	0.8 Mbit/s
0.5 MB/s	4 Mbit/s
1 MB/s	8 Mbit/s
2 MB/s	16 Mbit/s
5 MB/s	40 Mbit/s
10 MB/s	80 Mbit/s
20 MB/s	160 Mbit/s
25 MB/s	200 Mbit/s
50 MB/s	400 Mbit/s
100 MB/s	800 Mbit/s
250 MB/s	2,000 Mbit/s
500 MB/s	4,000 Mbit/s
1,000 MB/s	8,000 Mbit/s

Formula: MB/s = Mbit/s ÷ 8

