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## Magnetic Field Conversion Factors

| Add the indicated value to convert from ↓ to → | dBuV/m | dB Gauss | dBpT  | dBuA/m | dBWb/m <sup>2</sup> | dB gamma |
|--|--------|----------|-------|--------|---------------------|----------|
| 0 dB microvolts-per meter =                    | 0      | -209.5   | -49.5 | -51.5  | -289.5              | -109.5   |
| 0 dB gauss (1) =                               | 209.5  | 0        | 160   | 158    | -80                 | 100      |
| 0 dB picotesla                                 | 49.5   | -160     | 0     | -2     | -240                | -60      |
| 0 dB microampere-per-meter =                   | 51.5   | -158     | 2     | 0      | -238                | -58      |
| 0 dB weber per-square meter (2) =              | 289.5  | 80       | 240   | 238    | 0                   | 180      |
| 0 dB gamma =                                   | 109.5  | -100     | 60    | 58     | -180                | 0        |

| Multiply by the indicated value to convert ↓ to → | uV/m               | Gauss                 | pT                   | uA/m                  | Wb/m <sup>2</sup>      | gamma                 |
|---|--------------------|-----------------------|----------------------|-----------------------|------------------------|-----------------------|
| 1 microvolt-per-meter =                           | 1                  | $3.3 \times 10^{-11}$ | $3.3 \times 10^{-3}$ | $2.65 \times 10^{-3}$ | $3.3 \times 10^{-15}$  | $3.3 \times 10^{-6}$  |
| 1 gauss(1) =                                      | $3 \times 10^{10}$ | 1                     | $1 \times 10^8$      | $7.96 \times 10^7$    | $1 \times 10^{-4}$     | $1 \times 10^5$       |
| 1 picotesla =                                     | $3 \times 10^2$    | $1 \times 10^{-8}$    | 1                    | $7.96 \times 10^{-1}$ | $1 \times 10^{-12}$    | $1 \times 10^{-3}$    |
| 1 microampere-per-meter =                         | $3.77 \times 10^2$ | $1.26 \times 10^{-8}$ | 1.26                 | 1                     | $1.26 \times 10^{-12}$ | $1.26 \times 10^{-3}$ |
| 1 weber-per-square meter =                        | $3 \times 10^{14}$ | $1 \times 10^4$       | $1 \times 10^{12}$   | $7.96 \times 10^{11}$ | 1                      | $1 \times 10^9$       |
| 1 gamma =   | $3 \times 10^5$    | $1 \times 10^{-5}$    | $1 \times 10^3$      | $7.96 \times 10^2$    | $1 \times 10^{-9}$     | 1                     |

### Notes:

- (1) One gauss and one oerstead are equivalent and may be interchanged.
- (2) One weber-per-square meter and one tesla are equivalent and may be interchanged.
- (3) Decibel values are "rounded off" to the nearest 0.5 dB.