

Scientific and Engineering Notation Overview

Scientific - powers of 10

Engineering - powers of 10^3

Engineering Prefix

k	M	G	T	m	μ	n	p
10^3	10^6	10^9	10^{12}	10^{-3}	10^{-6}	10^{-9}	10^{-12}
kilo	mega	giga	tera	milli	micro	nano	pico

Quantity	Scientific	Engineering Notation	Engineering prefix
632	6.32×10^2	632	632
63,200	6.32×10^4	63.2×10^3	63.2 k
6,320,000	6.32×10^6	6.32×10^6	6.32 M
63,200,000	6.32×10^7	63.2×10^6	63.2 M
632,000,000	6.32×10^8	632×10^6	632 M
6,320,000,000	6.32×10^9	6.32×10^9	6.32 G
6,320,000,000,000	6.32×10^{12}	6.32×10^{12}	6.32 T
Quantity	Scientific	Engineering Notation	S.I. Unit With prefix
0.632	6.32×10^{-2}	0.632	0.632
0.00632	6.32×10^{-3}	6.32×10^{-3}	6.32 m
0.000632	6.32×10^{-4}	0.632×10^{-3}	0.632 m 632 μ
0.0000632	6.32×10^{-5}	63.2×10^{-6}	63.2 μ
0.00000632	6.32×10^{-6}	6.32×10^{-6}	6.32 μ
0.00000000632	6.32×10^{-9}	6.32×10^{-9}	6.32 p
0.00000000000632	6.32×10^{-12}	6.32×10^{-12}	6.32 n