

Prefixes

The powers of ten provide the basis for the prefixes used to indicate multiples (and submultiples) of units. In the SI (metric) system, the most common prefixes are:

SI (Metric) Prefixes

<u>Symbol</u>	<u>Prefix</u>	<u>Multiply by</u>	<u>...which is</u>
K	kilo-	10^3	one thousand
M	mega-	10^6	one million
G	giga-	10^9	one billion
T	tera-	10^{12}	one trillion
P	peta-	10^{15}	one quadrillion
E	exa-	10^{18}	one quintillion
m	mili-	10^{-3}	one thousandth
c	centi	10^{-2}	one hundredth
d	deci-	10^{-1}	one tenth

The **SI (metric)** system is very consistent with the use of prefixes. Unfortunately, the inch-pound system of units is not consistent in the use of prefixes as shown below.

Some Common US (inch-pound) Prefixes

Energy Units

1 kBtu	=	1,000 Btu
1 MBtu	=	1,000 kBtu (or 1,000,000 Btu)
1 Therm	=	100,000 Btu

Power Units

1KW	=	3414 Btu/hr or 1,000 W
1 MBh	=	1,000 Btu/hr
1 MMBtuh	=	1,000 MBh or 1,000,000 Btu/hr

I know - it **IS** confusing.....!!!