

Technical Abbreviations

Term Abbreviation

acre-foot acre-ft
 actual cubic feet per second acfs
 air mass 1.0 AM1
 alternating current ac or AC
 ampere A
 angstrom Å
 antireflective AR
 atmosphere atm
 atomic percent at. %
 atomic weight at. wt
 atto a

bar b
 millibar mb
 barrel bbl
 base (genetics) b
 thousand bases kb
 base pairs bp
 Baume Be
 Becquerel Bq
 boiling point bp
 British thermal unit Btu
 Bushel bu

¢ cent
 calorie cal
 candela cd
 centi c
 centigram cg
 centiliter cL
 centimeter cm
 circa (about) ca
 coefficient of performance COP
 concentrated (tables only) conc
 confer (compare) cf.
 cosine cos
 coulomb C
 counts per minute cpm
 cubic centimeter cm³
 cubic feet per minute cfm or ft³/min
 cubic feet per second cfs or ft³/s

Term Abbreviation

cubic foot ft³
 cubic inch in.³
 cubic meter m³
 cubic millimeter mm³
 cubic yard cu yd or yd³
 current-voltage I-V

day d
 deca da
 deci d
 decibel dB
 degree (angular) °, deg
 degree Celsius °C
 degree Fahrenheit °F
 degree Rankine °R
 diameter (tables only) diam
 direct current dc or DC
 dollar \$
 millions of dollars (tables only) \$M
 thousands of dollars \$K
 year of dollars year \$ (1992 \$)

electromagnetic interference EMI
 electromagnetic unit EMU
 electromotive force emf
 electron volt eV
 electrostatic unit ESU
 equation(s) Eq(s).
 equivalent weight equiv. wt
 exponential exp

Farad F
 feet per minute ft/min
 feet per second ft/s
 femto f
 fill factor FF
 fiscal year 2025 FY 2025
 foot ft
 foot-pound ft-lb
 foot-second ft-s
 freezing point fp

Term Abbreviation

| | |
|--|-------------------|
| gallon..... | gal |
| gallons per day | gal/d (or gpd) |
| gallons per minute..... | gal/min (or gpm) |
| gallons per second..... | gal/s (or gps) |
| gallons per year | gal/yr (or gpy) |
| gas (in chemical formula) | g |
| giga | G |
| grains per second | gr/s |
| gram..... | g |
| gram-atom..... | g-atom |
| gravity (force of)..... | g |
| gray | Gy |
| hectare | ha |
| hector..... | h |
| henry | H |
| hertz (cycles per second)..... | Hz |
| horsepower | hp |
| hour..... | h |
| inch | in. |
| inches per second..... | in./s |
| inch-pound..... | in.-lb |
| infrared..... | IR |
| inside diameter | ID |
| (use abbreviation only in such phrases as 3-cm-ID tube) | |
| international unit | IU |
| joule..... | J |
| kelvin..... | K |
| kilo | k |
| kilocalorie | kcal |
| kilocycles per second (kilohertz) | kHz |
| kilogram | kg |
| kilograms per cubic meter..... | kg/m ³ |
| kilograms per second | kg/s |
| kilometer | km |
| kilometers per second | km/s |
| kilopascal | kPa |
| kilovolt | kV |

Term Abbreviation

| | |
|---|-----------------|
| kilovolt-ampere | kVA |
| kilowatt | kW |
| kilowatt-hour..... | kWh |
| liquid (in chemical formula) | R |
| liter | L |
| liters per minute | LPM |
| logarithm (common) | log |
| logarithm (natural) | ln |
| lumen..... | lm |
| lux | lx |
| maximum (tables only) | max. |
| mean sea level..... | msl |
| mega (million) | M |
| megacycles per second (megahertz) | MHz |
| megavolt..... | MV |
| megawatt | MW |
| megawatt electric | MW _e |
| megawatt thermal..... | MW _t |
| melting point | mp |
| meter..... | m |
| meter-kilogram..... | m-kg |
| micro | μ |
| microampere | μA |
| microliter | μL |
| micrometer | μm |
| microvolt | μV |
| microwatt | μW |
| mile..... | mi |
| miles per hour | mph |
| miles per hour per second..... | mph/s |
| milli | m |
| milliamperere | mA |
| milligram | mg |
| milligram percent..... | mg % |
| milliliter..... | mL |
| millimeter | mm |
| million (mega) | M |
| million Btu..... | MBtu* |
| milliradian | mrad |

* 10⁶ Btu is preferred. Never use MMBtu.

Term Abbreviation

| | |
|--|--------------------|
| millivolt | mV |
| milliwatt..... | mW |
| minimum (tables only) | min. |
| minute | min |
| mole | mol |
| mole percent | mol % |
| molecular weight..... | mol wt |
| moles per liter (molar) | M |
| month (tables only)..... | mo |
| | |
| nano..... | n |
| nanogram | ng |
| nanometer | nm |
| nanosecond | ns |
| newton | N |
| normal pressure and temperature..... | NPT |
| number | no. |
| | |
| oersted..... | oe |
| ohm..... | Ω |
| open-circuit voltage | V _{oc} |
| ounce | oz |
| ounce-foot..... | oz-ft |
| ounce-inch | oz-in. |
| outside diameter (see inside diameter).... | OD |
| | |
| page(s)..... | p(p). |
| parts per billion | ppb |
| parts per million | ppm |
| parts per trillion..... | ppt |
| pascal..... | Pa |
| peak watt..... | W _p |
| per | / |
| percent..... | % |
| peta | P |
| pico | p |
| pound..... | lb |
| pound-foot | lb-ft |
| pound-inch | lb-in |
| pounds per square foot | lb/ft ² |

Term Abbreviation

| | |
|---|------------------|
| pounds per square inch absolute..... | psia |
| pounds per square inch gauge | psig |
| pounds per square inch..... | psi |
| public law | P.L. |
| | |
| radian..... | rad |
| revolutions per minute | rpm |
| revolutions per second..... | rps |
| root mean square | RMS |
| rotor diameter..... | <i>D</i> |
| | |
| second (time) | s |
| Section (laws) | § |
| short-circuit current..... | L _{sc} |
| siemens..... | S |
| sievert | Sv |
| sine | sin |
| solid (in chemical formula)..... | s |
| species (pl.)..... | spp. |
| species (sing.) | sp. |
| specific heat..... | C _p |
| square centimeter | cm ² |
| square foot..... | ft ² |
| square inch | in. ² |
| square kilometer | km ² |
| square meter..... | m ² |
| square millimeter | mm ² |
| standard (tables only) | std. |
| standard cubic foot..... | scf |
| standard temperature and pressure..... | STP |
| steradian | sr |
| | |
| tangent..... | tan |
| temperature (tables only) | temp. |
| tera..... | T |
| tesla | T |
| thousand (kilo) | k |
| thousand (used with money only)..... | K |
| metric ton (tonne) (10 ³ kg) | t [†] |
| short ton (2,000 lb)..... | tn |
| torr | Torr |

† Clarify whether a ton is short, long, or metric.
Avoid using the abbreviation.

Term Abbreviation

unit U
variety var.
versus (tables only) vs.
videlicet (namely) viz.
volt V
volume per volume v/v
volume percent vol %

watt W
(peak) watt W_p

Term Abbreviation

watt electric W_e
watt-hour Wh
watt thermal W_t
weber Wb
weight wt
weight percent wt %
weight per weight w/w

yard yd
year yr