



UNIT CONVERSIONS (FREE SAMPLE VERSION)

[User Guide & Disclaimer](#)

Conversion Spreadsheets

Distance	Weight
Temperature	Velocity
Area	Pressure
Volume	Energy
Time & Date	Power
Feet-Inches	US vs. Metric

Simple User Interface

34	Click On Any Yellow Cells And Enter (Replace With) You Value
2.83	Cell With Auto-Calculated Result
Sample	Cell Only Available in Full Version

This is a FREE Sample Version.
To use all features, get the Full Version of "G5 - Unit Conversions.xlsx"
Visit www.HVACnotebook.com for more spreadsheets.

DISTANCE CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis		Enter Value		Result	
inch <=> cm	1 inch = 2.54 cm		1.00	inches =	2.54	cm
	cm = inches / 2.54		1.00	cm =	0.39	inches
inch <=> mm	1 inch = 25.4 mm		1.00	inches =	25.40	mm
	mm = inches / 25.4		1.00	mm =	0.04	inches
feet <=> yard	1 yard = 3 feet		1.00	yard =	3.00	feet
	feet = yard / 3		1.00	feet =	0.33	yard
feet <=> meter	1 foot = 0.3048 meter		1.00	feet =	0.3048	meter
	1 meter = 3.28 feet		1.00	meter =	3.28	feet
km <=> feet	1 km = 3,281 feet		1.00	km =	3,281	feet
			3,281	feet =	1.00	km
km <=> yard	1 km = 1,094 yards		1.00	km =	1,094	yards
			1,094	yards =	1.00	km
km <=> mile	1 km = 0.6214 mile		1.00	km =	0.6214	mile
			0.621	mile =	1.00	km
mile <=> feet	1 mile = 5,280 feet		1.00	mile =	5,280	feet
	feet = miles / 5,280		5,280	feet =	1.00	mile
mile <=> yard	1 mile = 1,760 yards		1.00	mile =	1,760	yards
	yards = miles / 1,760		1,760	yards =	1.00	mile
mile <=> meters	1 mile = 1,609.3 meter		1.00	mile =	1,609	meter
			1,609.30	meter =	1.00	mile
mm <=> m	1 mm = 0.001 m		1.00	mm =	0.001	m
	1 m = 1,000 mm		1.0	m =	1,000	mm
km <=> m	1 m = 0.001 km		1.00	m =	0.001	km
	1 km = 1,000 m		1.0	km =	1,000	m
yard <=> meter	1 yard = 0.9144 meter		1.00	yard =	0.9144	meter
	1 meter = 1.09361 yard		1.00	meter =	1.09	yard

VOLUME CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value	Result
gallons <=> quarts	1 gallon = 4 quarts	1.00 gallons =	4.00 quarts
		4.00 quarts =	1.00 gallons
gallons <=> pints	1 gallon = 8 pints	1.00 gallons =	8.00 pints
		8.00 pints =	1.00 gallons
gallons <=> cu. ft.	1 gallon = 0.13368 cu. ft.	1.00 gallons =	0.13368 cu. ft.
	1 cu. ft. = 7.481 gallons	1.00 cu. ft. =	7.481 gallons
quarts <=> pints	1 quart = 2 pints	1.00 quarts =	2.00 pints
	1 pint = 0.5 quart	1.00 pints =	0.50 quarts
fluid oz <=> tablespoons	1 fluid oz = 2 tablespoons	1.00 fluid oz =	2.00 tablespoons
		2.00 tablespoons =	1.00 fluid oz
fluid oz <=> cup	1 cup = 8 fluid ounce	1.00 cups =	8.00 fluid ounce
		1.00 fluid ounce =	0.13 cups
cu. yard <=> cu. Ft	1 cu. yard = 27 cu. ft	1.00 cu. yard =	27.00 cu. ft.
		1.00 cu. ft. =	0.04 cu. yard
cu. yard <=> pints	1 cu. yard = 1,616 Pints	1.00 cu. yard =	1,616.00 Pints
		1,616 Pints =	1.00 cu. yard
cu. yard <=> cu. meters	1 cu. yard = 0.7646 cu. meters	1.00 cu. yard =	0.7646 cu. meters
		1.00 cu. meters =	1.3079 cu. yard
cu. yard <=> gallons	1 cu. yard = 202 gallons (US)	1.00 cu. yard =	202.00 gallons
		1.00 gallons =	0.0050 cu. yard
cu. cm <=> cu. Inches	1 cu. cm = 0.061 cu. inches	1.00 cu. cm =	0.061 cu. inches
		1.00 cu. inches =	16.393 cu. cm
cord <=> cu. Ft	1 cord = 128 cu. ft	1.00 cord =	128.00 cu. ft.
		1.00 cu. ft. =	0.01 cord

VOLUMETRIC FLOW

1 Gallon = 0.002228 ft ³ /sec
1 Gallon = 0.1337 ft ³ /min
1 ft ³ /sec = 448.9 gal./min

VELOCITY CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis		Enter Value			Result
fpm <=> mph	1 ft/min = 0.0114 mph		1.0	ft/min	=	0.0114 mph
	1 mph = 87.7 fpm		1.00	mph	=	87.7 ft/min
mph <=> fps	1 mph = 1.467 ft/sec		1.0	mph	=	1.467 ft/sec
	1 fps = 0.682 mph		1.0	ft/sec	=	0.682 mph
mps <=> mph	1 meter/sec = 2.237 mph		1.0	meter/sec	=	2.237 mph
	1 mph = 0.447 meter/sec		1.0	mph	=	0.447 meter/sec
fps <=> m/s	1 ft/s = 0.3048 m/s		1.0	ft/s	=	0.3048 m/s
	1 m/s = 3.2808 ft/s		1.0	m/s	=	3.2808 ft/s
km/hr <=> m/s	1 km/hr = 0.2778 m/s		1.0	km/hr	=	0.2778 m/s
	1 m/s = 3.5997 km/hr		1.0	m/s	=	3.5997 km/hr
km/hr <=> fpm	1 km/hr = 54.68 ft/min		1.0	km/hr	=	54.68 ft/min
			1.0	ft/min	=	0.02 km/hr
km/hr <=> mph	1 km/hr = 0.6214 mph		1.0	km/hr	=	0.6214 mph
			1.0	mph	=	1.6093 km/hr
meter/sec <=> fpm	1 meter/sec = 196.85 ft/min		1.0	meter/sec	=	196.85 ft/min
	fpm = meter/sec / 196.85		1.0	ft/min	=	0.005 meter/sec
knot <=> km/h	1 km/hr = 0.5396 knot		1.0	km/hr	=	0.5396 knot
	1 knot = 1.852 kilometers/hr		1.0	knot	=	1.852 km/hr
knot <=> mph	1 knot = 1.1515 mph		1.0	knot	=	1.1515 mph
			1.0	mph	=	0.8684 knot
knot <=> nau. m/h	1 knot = 1 nautical mile/hr		1.0	knot	=	1.00 nautical mile/hr
			1.0	nautical mil	=	1.00 knot
League <=> miles	1 League = 3 miles		1.0	Leauge	=	3.00 miles
			1.0	miles	=	0.33 League
mach <=> mph	1 mach = 741.455 mph		1.0	mach	=	741.455 mph
			1.0	mph	=	0.001 mach
mach <=> km/hr	1 mach = 1193.256 km/hr		1.0	mach	=	1193.256 km/hr
			1.0	km/hr	=	0.001 mach
meter/sec <=> km/hr	1 meter/sec = 3.6 kilometer/hr		1.0	meter/sec	=	3.60 kilometer/hr
			1.0	kilometer/hr	=	0.28 meter/sec
meter/sec <=> ft/min	1 meter/sec = 196.85 ft/min		1.0	meter/sec	=	196.85 ft/min
	1 ft/min = 0.00508 meter/sec		1.0	ft/min	=	0.005 meter/sec

PRESSURE CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value	Result
atm <=> psia	1 atm = 14.7 psia	1.00 atm =	14.70 psia
	psia = atm / 14.7	1.00 psia =	0.07 atm

atm <=> psf	1 atm = 2,116.2 lb/ft ²	1.00 atm =	2,116.2 lb/ft ²
	lb/ft = atm / 2,116.2	1.00 lb/ft ² =	0.00 atm

atm <=> in. Hg	1 atm = 29.92 in. Hg	1.00 atm =	29.92 in. Hg
	in. Hg = atm / 29.92	1.00 in. Hg =	0.03 atm

in. water <=> in. mercury	1 in. water = 0.0739 in mercury	1.00 in. water =	0.0739 in. mercury
	1 in. mercury = 13.53 in. water	1.00 in. mercury =	13.53 in. water

in. Hg <=> in. water	1 in. Hg = 12.8 in water	1.00 in. Hg =	12.80 in. water
	1 in. water = 0.0781 in. Hg	1.00 in. water =	0.0781 in. Hg

ft. H ₂ O <=> psi	1 ft.H ₂ O = 0.4335 psi	1.00 ft. H ₂ O =	0.4335 psi
	1 psi = 2.31 ft. H ₂ O	1.00 psi =	2.31 ft. H ₂ O

ft. H ₂ O <=> psf	1 ft.H ₂ O = 62.43 lbs./sq.ft.	1.00 ft. H ₂ O =	62.43 lbs/sq.ft
	psf = ft. H ₂ O / 62.43	1.00 lbs/sq.ft =	0.02 ft. H ₂ O

mm Hg <=> psi	1 mm Hg = 0.01934 lb/in ²	1.00 mm Hg =	0.01934 lb/in ²
	1 lb/in ² = 51.71 mm Hg	1.00 lb/in ² =	51.71 mm Hg

lb/ft ² <=> N/m ²	1 lb/ft ² = 47.88 N/m ²	1.00 lb/ft ² =	47.88 N/m ²
	1 N/m ² = lb/ft ² / 47.88	1.00 N/m ² =	0.02 lb/ft ²

mm Hg <=> torr	1 mm Hg = 1 torr	1.00 mm Hg =	1.00 torr
	1 torr = 1 mm Hg	2.00 torr =	2.00 mm Hg

Formulas

in. water = Pa x 249
ft. water = Pa x 0.00299
psi = kPa x 6.895

TEMPERATURE CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value		Result	
Celsius <=> Fahrenheit	Celsius = (5/9) x (Fahrenheit - 32)	180.00	Fahrenheit =	82.22	Celsius
	Fahrenheit = (9/5) x Celsius + 32	13.00	Celsius =	55.40	Fahrenheit
Celsius <=> Kevin	Celsius = Kevin - 273.15	300.00	Kevin =	26.85	Celsius
	Kevin = Celsius + 273.15	25.00	Celsius =	298.15	Kevin
Fahrenheit <=> Kevin	Fahrenheit = (9/5) x (Kevin - 273.15) + 32	290.00	Kevin =	62.33	Fahrenheit
	Kevin = (Fahrenheit - 32) * (5/9) + 273.15	62.33	Fahrenheit =	290.00	Kevin
Rankine <=> Kevin	Rankine = (9/5) x Kevin	20.00	Kevin =	36.00	Rankine
	Kevin = (5/9) x Rankine	36.00	Rankine =	20.00	Kevin

Common Equivalent

0 °C=> 32 °F
0 °C => 273.16 °K
0 °C => 491.69 °R
1° C => 1.8 °F
1 °F => 0.555 °C

US Units vs. Metric Units

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value			Result	
inch <=> cm	1 inch = 2.54 cm	1.00	inches	=	2.54	cm
	cm = inches / 2.54	60.00	cm	=	23.62	inches
inch <=> mm	1 inch = 25.4 mm	1.00	inches	=	25.40	mm
	mm = inches / 25.4	78.0	mm	=	3.07	inches
feet <=> meter	1 foot = 0.348 meters	1.00	feet	=	0.348	meters
	1 meter = 2.873 feet	1.00	meters	=	2.87	feet
gallons <=> liters	1 gallon = 3.785 liters	1.00	gallons	=	3.79	liters
	1 liter = 0.264 gallons	1.00	liters	=	0.26	gallons
sq. ft. <=> sq. meter	1 sq. ft = 0.0929 sq. meter	1.00	sq. ft.	=	0.09	sq. meter
	1 sq. meter = 10.764 sq. ft.	1.00	sq. meter	=	10.76	sq. ft.
GPM <=> Liter per sec.	1 GPM = 0.063 Liter per sec	1.00	GPM	=	0.06	Liter/sec
	1 Liter per sec = GPM	1.00	Liter/sec	=	15.87	GPM
psi <=> kPa	1 psi = 6.8948 kPa	1.00	psi	=	6.89	kPa
	1 kPa = 0.145 psi	1.00	kPa	=	0.145	psi
fpm <=> mm/s	1 fpm = 5.08 mm/s	1.00	fpm	=	5.08	mm/s
	1 mm/s = 0.1968 fpm	1.00	mm/s	=	0.20	fpm
cu. ft. <=> cu. meter	1 cu. ft. = 0.028 cu. meter	1.00	cu. ft.	=	0.03	meter
	1 cu. meter = 35.71 cu. ft.	1.00	meter	=	35.71	cu. ft.
cu. ft./min <=> L/min	1 cu. ft./min = 28.32 L/min	1.00	cu. ft./min	=	28.32	L/min
	1 L/min = 0.0353 cu.ft./min	1.00	L/min	=	0.035	cu. ft./min

ENERGY CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value	Result
Btu <=> J	1 Btu = 1,055.06 J	1.0 Btu =	1,055.06 J
		1.0 J =	0.000948 Btu
Btu <=> watt hr	1 Btu = 0.293 watt hr	1.0 Btu =	0.293 watt hr
		1.0 watt hr =	3.413 Btu
cal <=> J	1 cal = 4.186 J	1.0 cal =	4.186 J
		1.0 J =	0.239 cal
ft lbf <=> J	1 ft lbf = 1.3558 J	1.0 ft. lbf =	1.3558 J
		1.0 J =	0.738 ft. lbf
HP hr <=> kWh	1 HP hr = 0.7457 kWh	1.0 HP hr =	0.7457 kWh
		1.0 kWh =	1.341 HP hr
HP hr <=> J	1 HP hr = 2.6846x10 ⁶ J	1.0 HP hr =	2,684,600 J
		1.0 J =	0.00 HP hr
J <=> watt sec.	1 Joule = 1 watt second	1.0 Joule =	1.00 watt sec
		1.0 watt se =	1.00 Joule
J <=> Nm	1 Joule = 1 Nm	1.0 Joule =	1.00 Nm
		1.0 Nm =	1.00 Joule
J <=> ft lb	1 Joule = 1 ft lb	1.0 Joule =	1.00 ft lb
		1.0 ft lb =	1.00 Joule
kcal <=> Btu	1 kcal = 3.9683 Btu	1.0 kcal =	3.9683 Btu
		1.0 Btu =	0.2520 kcal
KJ <=> Btu	1 kJ = 0.947813 Btu	1.0 kJ =	0.947813 Btu
		1.0 Btu =	1.05506 kJ
kWh <=> J	1 kWh = 3.6x10 ⁶ J	1.0 kWh =	3,600,000 J
		1.0 J =	0.0000003 kWh
kWh <=> Btu	1 kWh = 3,412 Btu	1.0 kWh =	3,412.00 Btu
		1.0 Btu =	0.00029 kWh

WEIGHT CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value	Result
kg \Leftrightarrow grams	1 kg = 1,000 grams	1.0 kg =	1,000 grams
	1 gram = 0.001 kg	1.0 grams =	0.001 kg
kg \Leftrightarrow lbs	1 kg = 2.2046 lbs	1.0 kg =	2.2046 lbs
	1 lb = 0.454 kg	1.0 lbs =	0.454 kg
lb \Leftrightarrow oz	1 lb = 16 oz	1.0 lb =	16.00 oz
		1.0 oz =	0.063 lb
lb \Leftrightarrow grams	1 lb = 453.6 grams	1.0 lb =	453.60 grams
		1.0 grams =	0.0022 lb
oz \Leftrightarrow grams	1 oz = 28.35 grams	1.0 grams =	0.0353 oz
	1 gram = 0.0353 oz	1.0 oz =	28.33 grams
Ton \Leftrightarrow lbs	1 Ton = 2,000 lbs	1.0 Ton =	2,000 lbs
	1 lb = 0.0005 ton	1.0 lbs =	0.0005 Ton
Ton \Leftrightarrow kg	1 Ton = 907 kg	1.0 Ton =	907.0 kg
		1.0 kg =	0.0011 Ton
gallon \Leftrightarrow lbs	1 gal. H ₂ O = 8.33 lbs. H ₂ O	1.0 gal. H ₂ O =	8.33 lbs. H ₂ O
		1.0 lbs. H ₂ O =	0.120 gal. H ₂ O
slug \Leftrightarrow kg	1 slug = 14.594 kg	1.0 slug =	14.594 kg
		1.0 kg =	0.07 slug

TIME & DATE

[Back To MAIN SHEET](#)

Units	Conversion Basis		Enter Value			Result	
day <=> hours	1 day = 24 hours		1.00	day	=	24.0	hours
	hours = day / 24		1.00	hours	=	0.042	day
day <=> minutes	1 day = 1,440 minutes		1.00	day	=	1,440	minutes
			1.00	minutes	=	0.00	day
hour <=> minutes	1 hour = 60 minutes		1.00	hour	=	60	minutes
			1.00	minutes	=	0.02	hour
minutes <=> seconds	1 minutes = 60 seconds		1.00	minutes	=	60	seconds
			1.00	seconds	=	0.02	minutes
year <=> month	1 year = 12 months		1.00	year	=	12	months
			1.00	months	=	0.08	years
year <=> weeks	1 year = 52 weeks		1.00	year	=	52	weeks
			52.00	weeks	=	1.00	years
year <=> days	1 year = 365.25 days		1.00	year	=	365	Days
			360	Days	=	0.99	years

FEET & INCHES CONVERSIONS

[Back To MAIN SHEET](#)

Enter Inches		
Inches		
56	=	4' - 8"
98	=	8' - 2"
62	=	5' - 2"
	=	

Enter Feet & Inches			
Feet	Inches		
1	6	=	1' - 6"
2	1	=	2' - 1"
2	5	=	2' - 5"
1	6	=	1' - 6"

AREA CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value			Result	
sq. ft. <=> sq. in.	1 sq. ft. = 144 sq. in.	1.00	sq. ft.	=	144.0	sq. in.
	1 sq. in = 0.00694 sq. ft.	1.00	sq. in.	=	0.01	sq. ft.
sq. ft. <=> sq. meter	1 sq. ft. = 0.0929 sq. meters	1.00	sq. ft.	=	0.0929	sq. meters
	1 sq. meter = 10.764 sq. ft.	1.00	sq. meters	=	10.76	sq. ft.
sq. ft. <=> sq. cm	1 sq. ft. = 929 sq. cm	1.00	sq. ft.	=	929	sq. cm
	1 sq cm = 0.001076 sq. ft.	1	sq. cm	=	0.00	sq. ft.
sq. ft. <=> sq. yards	1 sq. ft. = 0.1111 sq. yards	1.00	sq. ft	=	0.1111	sq. yards
	1 sq. yard = 9 sq. ft.	1.00	sq. yards	=	9.00	sq. ft.

POWER CONVERSIONS

[Back To MAIN SHEET](#)

Units	Conversion Basis	Enter Value	Result
Btu/hr <=> MBH	1 Btu/hr = 0.001 MBH	1.0	Btu/hr = 0.001 MBH
	1 MBH = 1,000 Btu/hr	1.0	MBH = 1,000 Btu/hr
Btu/hr <=> W	1 Btu/hr = 0.293 W	1.0	Btu/hr = 0.29 W
	1 W = 3.413 Btu/hr	1.0	W = 3.413 Btu/hr
Btu/s <=> W	1 Btu/s = 1055.1 W	1.0	Btu/s = 1,055.1 W
		1.0	W = 0.00 Btu/s
HP <=> kW	1 HP = 0.746 kW	1.0	HP = 0.75 kW
	1 kW = 1.341 HP	1.0	kW = 1.34 HP
HP <=> ft lb/s	1 HP = 550 ft lb/s	1.0	HP = 550.0 ft lb/s
		1.0	ft lb/s = 0.00 HP
HP <=> ft lb/m	1 HP = 33 ft lb/m	1.0	HP = 33.00 ft lb/m
		1.0	ft lb/m = 0.03 HP
kW <=> W	1 kW = 1,000 Watts	1.0	kW = 1,000 Watts
	1 Watt = 0.001 kW	1.0	Watts = 0.001 kW
kW <=> Btu/hr	1 kW = 3,412 Btu/hr	1.0	kW = 3,412 Btu/hr
		1.0	Btu/hr = 0.000 kW
Therm <=> Btu/hr	1 Therm = 100,000 Btu/hr	1.0	Therm = 100,000 Btu/hr
		1.0	Btu/hr = 0.00 Therm
W <=> J/s	1 W = 1 J/s	1.0	W = 1.00 J/s
	1 J/s = 1 W	1.0	J/s = 1.00 W