

DO NOT DISTURB!
Automated Calibration is Progress.

CAUTION!

<p style="font-size: 24px; font-weight: bold; margin: 0;">CALLAB</p> <p style="font-size: 18px; font-weight: bold; margin: 0;">SOLUTIONS</p> <p style="font-size: 12px; margin: 0;">Fusing Software With Metrology</p> <p style="font-size: 10px; margin: 0;">Phone : 303.317.6670 Web : http://www.CallLabSolutions.com</p>	<p style="text-align: center; font-weight: bold;">Voltage Conversions</p> <p style="text-align: center; font-weight: bold;">Sine Wave</p> <p>RMS = 0.707 x Peak Voltage RMS = 1.11 x Average Voltage RMS = 0.3535 x Peak-to-Peak Voltage Peak = 1.414 x RMS Voltage Peak = 1.57 x Average Voltage Peak-to-Peak = 2.828 x RMS Voltage Average = 0.637 x Peak Voltage Average = 0.9 x RMS Voltage</p> <p style="text-align: center; font-weight: bold;">Log/Lin Conversion</p> <p>dB = 10 log [P2/P1] dB = 20 log [V1/V2] dBm = 10 log [Signal (mW)/1mW] dBmV = 20 log [Signal (mV)/1mV] P = Antilog (dBm/10) mV = Antilog (dBmV/20)</p> <p style="text-align: center; font-weight: bold;">Length</p> <p>inch = 2.54 centimeters foot = 30.48 centimeters yard = 0.9144 meters</p> <p style="text-align: center; font-weight: bold;">Pressure</p> <p>PSI = 0.0689475 Bar PSI = 0.03613 Inches Water PSI = 0.4912 Inches Mercury</p>	<p style="text-align: center; font-weight: bold;">Temperature</p> <p style="text-align: center;">C = (F - 32) * 5/9 F = (C * 9/5) + 32</p> <table style="width: 100%; border-collapse: collapse; font-size: 10px;"> <tr> <th>C</th> <th>F</th> <th>C</th> <th>F</th> <th>C</th> <th>F</th> </tr> <tr> <td>15.0 ... 59.00</td> <td>18.4 ... 65.12</td> <td>21.8 ... 71.24</td> <td></td> <td></td> <td></td> </tr> <tr> <td>15.2 ... 59.36</td> <td>18.6 ... 65.48</td> <td>22.0 ... 71.60</td> <td></td> <td></td> <td></td> </tr> <tr> <td>15.4 ... 59.72</td> <td>18.8 ... 65.84</td> <td>22.2 ... 71.96</td> <td></td> <td></td> <td></td> </tr> <tr> <td>15.6 ... 60.08</td> <td>19.0 ... 66.20</td> <td>22.4 ... 72.32</td> <td></td> <td></td> <td></td> </tr> <tr> <td>15.8 ... 60.44</td> <td>19.2 ... 66.56</td> <td>22.6 ... 72.68</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16.0 ... 60.80</td> <td>19.4 ... 66.92</td> <td>22.8 ... 73.04</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16.2 ... 61.16</td> <td>19.6 ... 67.28</td> <td>23.0 ... 73.40</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16.4 ... 61.52</td> <td>19.8 ... 67.64</td> <td>23.2 ... 73.76</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16.6 ... 61.88</td> <td>20.0 ... 68.00</td> <td>23.4 ... 74.12</td> <td></td> <td></td> <td></td> </tr> <tr> <td>16.8 ... 62.24</td> <td>20.2 ... 68.36</td> <td>23.6 ... 74.48</td> <td></td> <td></td> <td></td> </tr> <tr> <td>17.0 ... 62.60</td> <td>20.4 ... 68.72</td> <td>23.8 ... 74.84</td> <td></td> <td></td> <td></td> </tr> <tr> <td>17.2 ... 62.96</td> <td>20.6 ... 69.08</td> <td>24.0 ... 75.20</td> <td></td> <td></td> <td></td> </tr> <tr> <td>17.4 ... 63.32</td> <td>20.8 ... 69.44</td> <td>24.2 ... 75.56</td> <td></td> <td></td> <td></td> </tr> <tr> <td>17.6 ... 63.68</td> <td>21.0 ... 69.80</td> <td>24.4 ... 75.92</td> <td></td> <td></td> <td></td> </tr> <tr> <td>17.8 ... 64.04</td> <td>21.2 ... 70.16</td> <td>24.6 ... 76.28</td> <td></td> <td></td> <td></td> </tr> <tr> <td>18.0 ... 64.40</td> <td>21.4 ... 70.52</td> <td>24.8 ... 76.64</td> <td></td> <td></td> <td></td> </tr> <tr> <td>18.2 ... 64.76</td> <td>21.6 ... 70.88</td> <td>25.0 ... 77.00</td> <td></td> <td></td> <td></td> </tr> </table> <p style="text-align: center; font-weight: bold;">Torque</p> <p>Foot Pound = 1.356 Newton Meters Foot Pound = 12 Inch Pounds Inch Pound = 0.112985 Newton Meter Inch Pound = 0.08333 Foot Pounds</p> <p style="text-align: center; font-weight: bold;">Time & Frequency</p> <p>Frequency = 1/Period Period = 1/Frequency</p>	C	F	C	F	C	F	15.0 ... 59.00	18.4 ... 65.12	21.8 ... 71.24				15.2 ... 59.36	18.6 ... 65.48	22.0 ... 71.60				15.4 ... 59.72	18.8 ... 65.84	22.2 ... 71.96				15.6 ... 60.08	19.0 ... 66.20	22.4 ... 72.32				15.8 ... 60.44	19.2 ... 66.56	22.6 ... 72.68				16.0 ... 60.80	19.4 ... 66.92	22.8 ... 73.04				16.2 ... 61.16	19.6 ... 67.28	23.0 ... 73.40				16.4 ... 61.52	19.8 ... 67.64	23.2 ... 73.76				16.6 ... 61.88	20.0 ... 68.00	23.4 ... 74.12				16.8 ... 62.24	20.2 ... 68.36	23.6 ... 74.48				17.0 ... 62.60	20.4 ... 68.72	23.8 ... 74.84				17.2 ... 62.96	20.6 ... 69.08	24.0 ... 75.20				17.4 ... 63.32	20.8 ... 69.44	24.2 ... 75.56				17.6 ... 63.68	21.0 ... 69.80	24.4 ... 75.92				17.8 ... 64.04	21.2 ... 70.16	24.6 ... 76.28				18.0 ... 64.40	21.4 ... 70.52	24.8 ... 76.64				18.2 ... 64.76	21.6 ... 70.88	25.0 ... 77.00				<p style="text-align: center; font-weight: bold;">Mass</p> <p>1 pound = 0.45359237 kilograms 1 kilogram = 2.204622621849 pounds 1 ounce = 28.349523125 grams 1 gram = 0.002204622621849 ounces 1 ton = 907.18474 kilograms 1 ounce = 0.9114583333333333 troy ounces</p> <p style="text-align: center; font-weight: bold;">Volume</p> <p>1 gallon = 3.785411784 liters 1 liter = 0.2641720523582 gallons 1 fluid ounce = 29.5735295625 milliliters 1 milliliter = 0.002083333333333333 fluid ounces</p> <p style="text-align: center; font-weight: bold;">Angle</p> <p>1 degree = 1.1111111111111111 radians 1 degree = 0.01745329251994 grad 1 grad = 0.0025 degrees 1 grad = 0.01570796326795 radians 1 radians = 57.29577951308 degrees 1 radians = 63.66197723676 grad</p> <p style="text-align: center; font-weight: bold;">Total Harmonic Distortion</p> $THD = 20 * \text{Log} \left[\frac{\sqrt{V_2^2 + V_3^2 + \dots + V_x^2}}{V_1} \right]$ $THD = 10 * \text{Log} \left[\frac{P_2^2 + P_3^2 + \dots + P_x^2}{P_1^2} \right]$	<p style="text-align: center; font-weight: bold;">Prefixes</p> <table style="width: 100%; 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font-weight: bold;">Sigma Conversion Table</p> <table style="width: 100%; border-collapse: collapse; font-size: 10px;"> <tr> <th>Yield</th> <th>Sigma</th> <th>Defects / Million</th> </tr> <tr> <td>99.9997%</td> <td>6.00</td> <td>3.4</td> </tr> <tr> <td>99.9770%</td> <td>5.00</td> <td>230</td> </tr> <tr> <td>99.3790%</td> <td>4.00</td> <td>6,210</td> </tr> <tr> <td>93.3200%</td> <td>3.00</td> <td>66,800</td> </tr> <tr> <td>69.2000%</td> <td>2.00</td> <td>380,000</td> </tr> <tr> <td>31.0000%</td> <td>1.00</td> <td>690,000</td> </tr> </table>	1e^24	yotta	Y	1e^-3	milli	m	1e^21	zetta	Z	1e^-6	micro	μ	1e^18	exa	E	1e^-9	nano	n	1e^15	peta	P	1e^-12	pico	p	1e^12	tera	T	1e^-15	femto	f	1e^9	giga	G	1e^-18	atto	a	1e^6	mega	M	1e^-21	zepto	z	1e^3	kilo	k	1e^-24	yocto	y	length	metre (meter)	m	mass	kilogram	kg	time	second	s	electric current	ampere	A	thermodynamic substance	kelvin	K	luminous intensity	mole	mol		candela	cd	Yield	Sigma	Defects / Million	99.9997%	6.00	3.4	99.9770%	5.00	230	99.3790%	4.00	6,210	93.3200%	3.00	66,800	69.2000%	2.00	380,000	31.0000%	1.00	690,000
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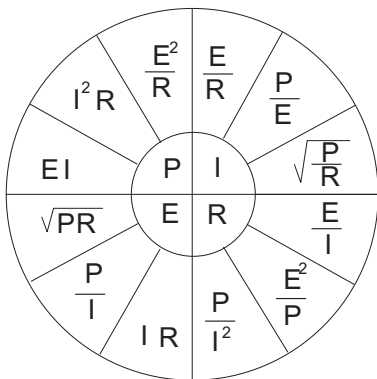
CALLAB

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Ohms Law



Voltage Conversions

Sine Wave

RMS = 0.707 x Peak Voltage
RMS = 1.11 x Average Voltage
RMS = 0.3535 x Peak-to-Peak Voltage
Peak = 1.414 x RMS Voltage
Peak = 1.57 x Average Voltage
Peak-to-Peak = 2.828 x RMS Voltage
Average = 0.637 x Peak Voltage
Average = 0.9 x RMS Voltage

Log/Lin Conversion

dB = 10 log [P2/P1]
dB = 20 log [V1/V2]
dBm = 10 log [Signal (mW)/1mW]
dBmV = 20 log [Signal (mV)/1mV]
P = Antilog (dBm/10)
mV = Antilog (dBmV/20)

Length

inch = 2.54 centimeters
foot = 30.48 centimeters
yard = 0.9144 meters

Pressure

PSI = 0.0689475 Bar
PSI = 0.03613 Inches Water
PSI = 0.4912 Inches Mercury

Temperature

C = (F - 32) * 5/9 | F = (C * 9/5) + 32

C	F	C	F	C	F
15.0 ... 59.00	18.4 ... 65.12	21.8 ... 71.24			
15.2 ... 59.36	18.6 ... 65.48	22.0 ... 71.60			
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Torque

Foot Pound = 1.356 Newton Meters
Foot Pound = 12 Inch Pounds
Inch Pound = 0.112985 Newton Meter
Inch Pound = 0.08333 Foot Pounds

Time & Frequency

Frequency = 1/Period
Period = 1/Frequency

Mass

1 pound = 0.45359237 kilograms
1 kilogram = 2.204622621849 pounds
1 ounce = 28.349523125 grams
1 gram = 0.002204622621849 ounces
1 ton = 907.18474 kilograms
1 ounce = 0.9114583333333333 troy ounces

Volume

1 gallon = 3.785411784 liters
1 liter = 0.2641720523582 gallons
1 fluid ounce = 29.5735295625 milliliters
1 milliliter = 0.002083333333333333 fluid ounces

Angle

1 degree = 1.1111111111111111 radians
1 degree = 0.01745329251994 grad
1 grad = 0.0025 degrees
1 grad = 0.01570796326795 radians
1 radians = 57.29577951308 degrees
1 radians = 63.66197723676 grad

Total Harmonic Distortion

$$THD = 20 * \text{Log} \left[\frac{\sqrt{V_2^2 + V_3^2 + \dots + V_x^2}}{V_1} \right]$$

$$THD = 10 * \text{Log} \left[\frac{P_2^2 + P_3^2 + \dots + P_x^2}{P_1^2} \right]$$

Prefixes

1e^24	yotta	Y	1e^-3	milli	m
1e^21	zetta	Z	1e^-6	micro	μ
1e^18	exa	E	1e^-9	nano	n
1e^15	peta	P	1e^-12	pico	p
1e^12	tera	T	1e^-15	femto	f
1e^9	giga	G	1e^-18	atto	a
1e^6	mega	M	1e^-21	zepto	z
1e^3	kilo	k	1e^-24	yocto	y

SI Units

length	metre (meter)	m
mass	kilogram	kg
time	second	s
electric current	ampere	A
thermodynamic substance	kelvin	K
luminous intensity	mole	mol
	candela	cd

Sigma Conversion Table

Yield	Sigma	Defects / Million
99.9997%	6.00	3.4
99.9770%	5.00	230
99.3790%	4.00	6,210
93.3200%	3.00	66,800
69.2000%	2.00	380,000
31.0000%	1.00	690,000