

Wind Conversion

From the user, we are given a wind value and the unit to convert.

To convert between miles per hour (mph) and knots (kts):

$$Wind_{kts} = 0.868391 \times Wind_{mph}$$

$$Wind_{mph} = 1.15155 \times Wind_{kts}$$

To convert between miles per hour (mph) and meters per second (m/s):

$$Wind_{m/s} = 0.44704 \times Wind_{mph}$$

$$Wind_{mph} = 2.23694 \times Wind_{m/s}$$

To convert between miles per hour (mph) and feet per second (ft/s):

$$Wind_{ft/s} = 1.46667 \times Wind_{mph}$$

$$Wind_{mph} = 0.681818 \times Wind_{ft/s}$$

To convert between miles per hours (mph) and kilometers per hour (km/h):

$$Wind_{km/h} = 1.609344 \times Wind_{mph}$$

$$Wind_{mph} = 0.621371 \times Wind_{km/h}$$

To convert between knots (kts) and meters per second (m/s):

$$Wind_{m/s} = 0.514791 \times Wind_{kts}$$

$$Wind_{kts} = 1.94254 \times Wind_{m/s}$$

To convert between knots (kts) and feet per second (ft/s):

$$\begin{aligned}Wind_{ft/s} &= 1.68895 \times Wind_{kts} \\Wind_{kts} &= 0.592085 \times Wind_{ft/s}\end{aligned}$$

To convert between knots (kts) and kilometers per hour (km/h):

$$\begin{aligned}Wind_{km/h} &= 1.85325 \times Wind_{kts} \\Wind_{kts} &= 0.539593 \times Wind_{km/h}\end{aligned}$$

To convert between meters per second (m/s) and feet per second (ft/s):

$$\begin{aligned}Wind_{m/s} &= 0.3048 \times Wind_{ft/s} \\Wind_{ft/s} &= 3.28084 \times Wind_{m/s}\end{aligned}$$

To convert between meters per second (m/s) and kilometers per hour (km/h):

$$\begin{aligned}Wind_{km/h} &= 3.6 \times Wind_{m/s} \\Wind_{m/s} &= 0.277778 \times Wind_{km/h}\end{aligned}$$

To convert between feet per second (ft/s) and kilometers per hours (km/h):

$$\begin{aligned}Wind_{km/h} &= 1.09728 \times Wind_{ft/s} \\Wind_{ft/s} &= 0.911344 \times Wind_{km/h}\end{aligned}$$