

# cedargrove\_ohmslaw

## Ohm's Law Calculator

A CircuitPython helper for calculating an Ohm's Law result from two input parameters.

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### Implementation Notes

Hardware:

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://github.com/adafruit/circuitpython/releases>

```
ohms_law(ohms=None, milliamperes=None, volts=None)
```

A helper to calculate an Ohm's Law formula result. When two numeric values are supplied (or two numeric values and a third = **None**), the two numeric values are used to calculate and return the missing value.

<b>Parameters:</b>	<ul style="list-style-type: none"><li>• <b>ohms</b> – The Ohm's Law resistance value in ohms. Can be any numeric value. Default value is <b>None</b>.</li><li>• <b>milliamperes</b> – The Ohm's Law current flow value in milliamperes. Can be any numeric value. Default value is <b>None</b>.</li><li>• <b>volts</b> – The Ohm's Law voltage value in volts. Can be any numeric value. Default value is <b>None</b>.</li></ul>
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Example:

```
>>> from cedargrove_ohmslaw import ohms_law
>>> ohms_law(ohms=1000, volts=3.3)
3.3 # current in milliamperes
>>> ohms_law(volts=5, milliamperes=100)
50.0 # resistance in ohms
>>> ohms_law(milliamperes=5, ohms=2000)
10.0 # voltage in volts
```