

Voltage From Power And Current Calculator

Calculate ideal voltage from entered real power in watts and current in amperes using direct algebra.

Generated October 10, 2026

<https://www.elecatrix.com/voltage-current-resistance/voltage-from-power-current-calculator/>

Inputs

Input	Value	Unit
Power	600	W
Current	5	A

Results

Result	Value	Unit
Calculated voltage	120	V
Power used	600	W
Current used	5	A

Calculation details

Detail	Value	Unit
Calculation basis	Voltage V = power W / current A.	
Boundary	Ideal direct algebra only; no phase model, power factor, voltage-drop, source regulation, conductor, protection, equipment rating, or code-compliance result is made.	

Formulas

$$V = (P/I)$$

Warnings and limitations

This direct-algebra voltage estimate does not determine source regulation, voltage drop, phase relationship, equipment rating, conductor size, protection, or code compliance.