

Admittance Calculator

Resolves complex admittance magnitude and phase from conductance and susceptance values in siemens and degrees.

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

Inputs

Input	Value	Unit
Conductance	0.1	S
Susceptance	0.05	S

Results

Result	Value	Unit
Admittance magnitude	0.1118	S
Admittance phase	26.5651	deg

Calculation details

Detail	Value	Unit
Calculation basis	Admittance magnitude and phase are calculated from conductance and susceptance.	
Boundary	This is ideal complex-admittance arithmetic. It does not select components, evaluate harmonics, or approve an installation.	

Formulas

$$|Y| = \sqrt{G^2 + B^2}$$

$$\theta = \operatorname{atan2}(B, G)$$

$$Y = G + jB$$

Warnings and limitations

This is ideal complex-number arithmetic. Verify sign convention, frequency, measurement basis, harmonics, and equipment ratings before applying a result to a real circuit.