

Load Factor Calculator

Converts period energy, period hours, and peak demand into average demand, load factor, and peak-to-average ratio while leaving demand windows and tariff rules outside the result.

Generated October 10, 2026

<https://www.elecatrix.com/power-energy-cost/load-factor-calculator/>

Inputs

Input	Value	Unit
Period energy	7200	kWh
Period hours	240	h
Peak demand	50	kW

Results

Result	Value	Unit
Average demand	30	kW
Load factor	0.6	x
Load factor percent	60	%
Peak-to-average ratio	1.6667	x

Calculation details

Detail	Value	Unit
Calculation basis	Average demand is period energy divided by period hours. Load factor is average demand divided by peak demand.	
Boundary	Screening estimate only; no utility interval validation, tariff analysis, demand-charge model, or capacity approval is made by this calculator.	

Formulas

$$P_{avg} = \frac{E_{period}}{t_{period}}$$

$$F_{load} = \frac{P_{avg}}{P_{peak}}$$

$$F_{load, \%} = F_{load} \times 100$$

Warnings and limitations

Load Factor Calculator

Converts period energy, period hours, and peak demand into average demand, load factor, and peak-to-average ratio while leaving demand windows and tariff rules outside the result.

Generated October 10, 2026

<https://www.elecatrix.com/power-energy-cost/load-factor-calculator/>

This load-factor estimate uses entered energy, hours, and peak-demand assumptions only. It does not replace utility interval data, capacity planning, demand-charge analysis, or equipment sizing.