

Dwelling Pool Equipment Load Calculator

Compare entered pool equipment load with an entered panel or service capacity while keeping Article 680 and protection review separate.

Generated October 10, 2026

<https://www.elecatrix.com/residential-load-service/dwelling-pool-equipment-load-calculator/>

Inputs

Input	Value	Unit
Pool pump load	1.5	kW
Pool heater load	5.5	kW
Pool lighting load	0.4	kW
Pool control load	0.2	kW
Entered simultaneous factor	100	%
Entered panel capacity	24	kW

Results

Result	Value	Unit
Connected pool load	7.6	kW
Entered simultaneous demand	7.6	kW
Entered capacity margin	16.4	kW

Calculation details

Detail	Value	Unit
Calculation basis	Equipment screen sums entered component loads and applies the entered simultaneous factor.	
Review boundary	Planning worksheet only; no NEC dwelling load calculation, Article 680, bonding, grounding, GFCI, or code-compliance approval is made.	

Formulas

connected pool equipment load = sum of entered component loads

planning demand = connected load x simultaneous percent / 100

capacity margin = entered capacity - planning demand

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Warnings and limitations

This pool equipment screen does not perform an NEC dwelling load calculation, Article 680 review, GFCI/bonding/grounding review, conductor sizing, OCPD selection, or final service approval.