

BENGE'S Whole-House Generator Sizing Worksheet

HARDWARE

Unsure what size backup generator you need? Use this tool to estimate the power needed to run what you want during an outage and share your findings with the electrician doing your free assessment.

TIPS FOR READING APPLIANCE TAGS

Watts (W): Use the number listed as-is

Kilowatts (kW): Multiply by 1,000 (1.5 kW = 1,500 W)

Volt-amps (VA): Use number as-is since VA = W

Volts & amps: Multiply both (120 V x 12 A = 1,440 W)

YOUR HOME'S SQUARE FOOTAGE:

YOUR HOME'S HEATING FUEL: ☐ NATURAL GAS ☐ PROPANE

Step 1: Identify What You Want to Power & Log the Watts Needed to Run Each

	LOAD SOURCE	AVG. WATTS TO RUN*	AVG. WATTS FOR STARTUP†	ACTUAL TOTAL WATTS TO RUN	
MUST-HAVES	Refrigerator	500	1,000	_____	* The power that each device pulls will vary by brand, model, age, and size. These averages should be considered estimating figures only. A master electrician can calculate your home's true load before you buy a whole-home generator.
	Freezer	750	1,500	_____	
	Sump pump	500	1,000	_____	
	Gas furnace blower skip if you have electric heat	500	1,000	_____	
	Well pump	2,000	4,000	_____	
	Garage door opener	500	1,000	_____	
	Lights & outlets incl. router & security (per 1,000 sq. ft.)	3,000	N/A	_____	
CONVENIENCES YOU'D MISS	Medical equipment	Varies	N/A	_____	† Only add the avg. watts for startup to the actual total watts for the <u>one</u> device that needs the highest amount of power for startup. Don't add the avg. watts for startup to any other device's actual total watts to run.
	Central air conditioning (per ton)	1,000	1,500	_____	
	Electric heat skip if you heat with gas (per 1,000 sq. ft.)	12,000	N/A	_____	
	Electric water heater	4,500	N/A	_____	
	Electric range/oven (per burner)	8,000	N/A	_____	
	Electric clothes dryer	5,500	N/A	_____	
	Dishwasher	1,500	N/A	_____	
	Microwave	1,000	N/A	_____	
	Appliances using kitchen countertop outlets	1,500	N/A	_____	
	Pool pump	1,000	2,000	_____	
	TV & home entertainment	1,000	N/A	_____	
	EV charger Level 2	11,500	N/A	_____	
	Hot tub	10,000	N/A	_____	

New to Backup Generators?



Check out Benge's free comprehensive buyer's guide



benges.com/backup

Step 2: Find Your Ballpark Generator Size

- Add together all of your total actual watts to run must-have devices and conveniences you'd miss from Step 1.
- Divide this total you get by 1,000 for the kilowatts value.
- Then, multiply by 1.2 and round up to the closest generator size.

E.g., if your total from step 1 is 16,250 W, you'd likely need a 20kW generator. See below for how the math works in this example:

$$\text{STEP 1 TOTAL } 16,250 \text{ W} \div 1,000 = \text{KILOWATTS } 16.25 \text{ kW} \times 1.2 = \text{GENERATOR } \sim 20\text{kW}$$

Step 3: Book a Free In-Home Assessment

Ready to take the next step? Learn about EleXcor, Benge's trusted generator installation partner and schedule an assessment →

elexcor.com/benges-generators