



The **best** generator is the **right** generator for your needs,
but it's important to allow growth for your future
and select a generator for years of trouble free operation.

SELECTING THE BEST GENERATOR FOR YOUR JOB/NEEDS

Key points to consider:

- Are you running sensitive electronic equipment?
- What secondary purpose do you have for the generator?
- How large a unit do you require?

Other factors to consider:

- KVA or KW?
- Available space
- Electric start or pull start/recoil
- Noise
- 12-volt charging system.

The type of generator needed is generally determined by what is plugged into the unit. Although this sounds like an obvious statement, there are two main types of portable petrol generators on the market.

All generators produce a "SINEWAVE" so don't be fooled by marketing.

INVERTER GENERATOR:

Just like the latest LCD/LED TVs that produce better quality images, are light and more compact than the older style CRT TV, the same can be said for petrol inverter generators over conventional petrol generators.

Inverter generators produce clean power commonly called "PURE SINEWAVE" and are perfect for computers, TV, Hi-Fi and many brushless tools, including raw power tools and equipment. The majority of modern battery-operated power tools have sophisticated charges and these require an inverter generator.

CONVENTIONAL GENERATOR:

Conventional generators are commonly called "sinewave" or AVR generators. They require the alternator to run at constant 3000RPM to produce 230volts at 50Hz. The power is pulled from the alternator directly to the socket on the front panel. (No conversion or stabilizing)

Fluctuations in voltage and frequency happen when the engine drives the alternator at more, or less than 3000RPM. This can be because of many factors e.g. high load, poor fuel or poor tuning of the engine.

There are many reasons sensitive equipment fail on a conventional generator, but fluctuating frequency is one of the most common causes.

OUR INVERTER GENERATOR:

Powerbuilt's "PURE POWER" series inverter generators have all your power requirements covered, whether you are on the campsite, worksite, or running sensitive electronics.

Heavy-duty open-frame petrol inverter generators are safe to power the new generation power tools and chargers, televisions, computers and all your standard 230-volt equipment, whilst our whisper-quiet PBI2000X offers exceptional portability and by paralleling two units together a total of 3400watts can be achieved.

Ideal for the worksite, farmside or emergency backup – never be without power again when and where you need it most. All models have ECO throttle which reduces fuel consumption and noise at low loads, whilst the larger models have both 15amp and 32amp single phase IP66 plug with RCD protection.

Our generators are designed for New Zealand conditions and offer you exceptional service, performance and reliability the Powerbuilt brand is known for. At Powerbuilt we partner with our manufacturers to ensure the latest technology is matched with proven technology to ensure your generator is ready when you need it most, for years to come.

All Powerbuilt generators are backed by Powerbuilt worldwide and at home in New Zealand. We have established service agents across the country ensuring you have the back up and support for years to come. Spare parts are stocked for all units, please enquire as required.

HOW MUCH POWER DO YOU NEED?

Key points to consider:

- 1 Choose which devices you want to power at the same time.
- 2 Record and add the running watts listed for each device that you need to power.
- 3 Record the starting watts listed for each device.
- 4 Select the one device with the highest starting watts, add that number to the total running watts to determine the total voltage requirement.

Calculation example

DEVICE	RUNNING WATTS	ADDITIONAL STARTING WATTS	GENERATOR SIZE
Computer	400		MINIMUM STARTING WATTS FOR YOUR NEEDS ↓ 6575 STARTING WATTS
TV	150		
Box Fan	200	400	
Cell Phone Battery Charger	25		
Washing Machine	1100	2300	
Kettle	2400		
TOTAL	4275 +	2300 =	

	DEVICE	RUNNING WATTS	STARTING WATTS
RECREATION OUTDOOR	AM/FM RADIO	200	
	FAN	200	400
	ELECTRIC WEED TRIMMER	500	650
	LAPTOP COMPUTER	200	
	SMALL FRIDGE	300	600
	HEDGE TRIMMER	300	900
	COFFEE MACHINE	1100	1400
HOUSE HOLD	LIGHTING 1X 100W GLOBE	100	
	LIGHTING 1X 11W LED	11	
	KETTLE	2400	
	WASHING MACHINE	1100	2300
	MICROWAVE	100	1700
	SUMP PUMP *	1100	2100
	WELL PUMP *	1000	2100
CONSTRUCTION	HEATING ELEMENT	1200	
	AIR COMPRESSOR 2.5HP *	1800	7200
	WELDER 200AMP		8500
	DRILL PRESS 750WATT	750	3800
	HAND HELD DRILL - STANDARD	1000	1200
	HAND HELD DRILL - HEAVY DUTY	1500	1800
	RECIPRICATING SAW	900	1200
	GRINDER	1000	1200
	CIRCULAR SAW	1400	2300

Watts listed are approximate.

Check your appliance for actual requirements.

* Sump pumps and air compressors are high load items, 4x running wattage should be used.

NOTE: As a guide turning motors require 2-3 times the running wattage to start, if you don't know the start watts use this as a guide and contact manufacturer for confirmation.



ALLTRADE TOOLS NZ (2016) LTD

