



TOOLINE[®]

**EVERYTHING
YOU NEED TO
KNOW ABOUT
GENERATORS
& INVERTERS**

Your questions answered...

**READ THIS BEFORE
YOU MAKE YOUR CHOICE!**

www.tooline.co.nz



WHY DO YOU NEED BACKUP OR OFFSITE POWER?

Ask yourself what you need to power if you're suddenly offgrid, whether that's because of an outage, or because you're away from a regular power source.

What are your must-haves? It could be power for your waterpump if you live in the country. It might be power for your tools on the construction site. Maybe it's being able to plug your technology in and keep your phones charged and laptops

working. Perhaps it's a combination. Reasons can be as different as people themselves, and as diverse as the generators that do the job.

From film crews in remote locations to emergency backup following a disaster, there are models to suit whatever you need - and we have the range of top quality models you can have confidence in to put the power back in your hands.

WHAT'S THE DIFFERENCE BETWEEN GENERATORS AND INVERTERS?

Going back, generators were generators. But times have changed, and our needs are more demanding. That's where inverters come in. They're still generators but they work a different way. Your old school generators can have fluctuations in power levels, which isn't great when you're running expensive electronic tools or computers, phones and so on.

With an inverter, the engine speed varies to compensate for the load - whereas old style generators just chug along at a constant speed. That means less noise, and vibration, and more fuel efficiency.

This process is often called '**clean power**' because inverters produce alternating current (AC) at a high frequency, convert this back to direct current (DC) and then back again to AC that you can use reliably with electronic equipment, appliances and technology.

AREN'T THEY ALL MUCH THE SAME?

No. No way! Traditional generators have their place, undoubtedly, but inverters are becoming more standard because no-one wants to risk expensive gear with a potential power surge or drop off.

And once you've worked out whether your requirements lean towards petrol, or diesel, you have to look at matching capacity with need. It's not hard if you can manage some simple math.

What's even better is that we have models to meet those needs. From small portable numbers through to Prime Power Diesel Generators that can virtually run your whole house. The trick is just matching you with the right one.

Put simply, if you want portability and low noise/less vibration - you're probably best off with an inverter. And go for something that's a bit bigger than you think you'll need, so you're not running it at capacity all the time or risking your devices.

COMMONLY ASKED QUESTIONS...

What's the difference between petrol and diesel?

Cost is a big part of it. So is the amount you're going to use your generator. If it's high use on a regular basis, diesel is going to be much cheaper. However petrol models often win out for greater convenience and portability.

Where does Prime Power fit in?

This is talking big. Usually wired into your house by an electrician, often set to come on automatically if the power goes off. It's not you if you just want to run your computer, or a heater, or go off camping or tailgating with some portable power. We're talking backing up a dairy shed or essential building, not plugging in a toaster.

How much noise do generators make?

They're all different, but generators are usually measured in dBa from a 7 metre distance. Our model comparison chart tells you what these results are.

To put the figures in context, normal conversation usually measures around 60 dBa while an operating chainsaw is about 110 dBa and most of our models fit within this range.

Can I be clever with the way I use my generator and power more things?

You sure can. If you don't have to start everything at once, or run everything at the same time, you'll need less capacity. Maybe start with your most essential items. Turn off (or give a rest to heavy power consumers) while you recharge or use other appliances.

HOW DO YOU KNOW HOW MUCH CAPACITY YOU NEED?

They say this is the difficult bit, but it's not really. There are just a couple of things to work out and to remember...

First establish what equipment you will want to power off the generator all at the same time. It often helps to make a list. On the nameplate or in the instruction manuals for your appliances (or online) you'll find what they call the 'running wattage'.

Add these together to work out what you'll need to run them simultaneously.

However, there's something else that's important to consider. It can take up to six times the 'running wattage' to start an appliance up. so find out which of your gear has the highest 'starting wattage' and add that to your total.

When you tally them all up, that's how much output you'll need from your generator to start and run your stuff.

Because you won't want to run your generator at full capacity all the time, you'll also probably want to allow a little extra just to be safe.

And that's how you calculate what size of generator you need.

FOR EXAMPLE: one of our Tooline HY22i Digital Inverter Generators will provide 2000 running watts of power and will run for 7 hours at 50% capacity, with one 230V AC outlet.

Check out the rough running guide in this pamphlet to see what you can comfortably run off this...

WHAT GENERATOR OWNERS SAY...



We live in a rural location, so if the power goes off, we really do need to get our own power up and running. But we've found the most important things have turned out to be running the water pump (because obviously, without it, we're without water and you don't realise how much you need it until it's not there) and things like lighting, and heating. We're safeguarded with a generator.

I love being outdoors, but there's stuff we need to take with us so we can really enjoy the experience. When you think about it, it's amazing what you need power for. And it's amazing what a difference having that power can make.

If you want to take it up a level, take a generator with you.

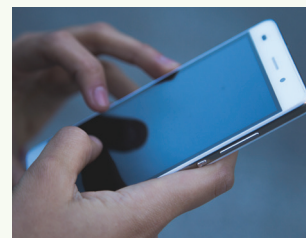
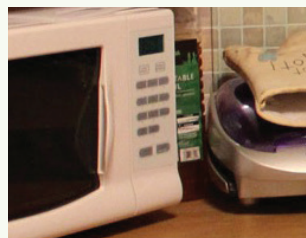
On a construction site, you can't always get reliable power. And with the cost of equipment and the built-in electronics of a lot of your gear these days, you don't want to take any risks.

The convenience and knowing you're covered if you need to charge up is vital.

And there are times when you just need to plug your phone or computer in too!



HOW TO DECIDE WHAT YOU NEED, FOR WHAT...



If you're using your generator for **home backup**, you might have a fridge that you want to power. While its 'running wattage' might only be in the 150-200 range, its 'starting wattage' could be as much as 1200 - so you need to allow for that other capacity when turning it on.

However, once it's running, you only need the smaller amount, so you can start up and run other gear. Think about doing things in sequence, and what you really need, rather than trying to power up the whole lot, simultaneously. You might be surprised what uses how much power...

A STEP-BY-STEP GUIDE TO WORKING OUT YOUR REQUIREMENTS...

It's all about what you need to power and when. If you plan to start up some of your gear with larger 'starting wattage' first, then drop down to less hungry appliances you'll be able to run more, more efficiently.

If something doesn't need to run all the time, turn it off while you start up and run something else. Think carefully about your power needs and plan ahead.

Perhaps you can turn off your fridge for ten minutes while you charge up your phone and make a piece of toast. You get the idea. Be smart with how you go about things...

THINK ABOUT what you need in terms of portability, running noise, what sort of starting system you need and how much fuel capacity you've got.

Getting the right generator isn't hard, but it does take a bit of forethought.

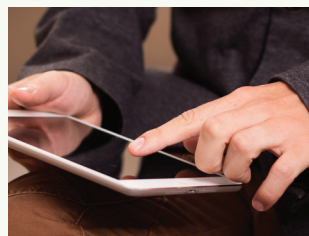
START HERE:

Make a list of all the things that you'll want to power up at the same time.

Check their 'running wattage' and add up these amounts. That's how much capacity you'll need to run them and will determine the size of generator/inverter that you'll need.

However, starting appliances up takes more power than just running them. So you'll need to check the 'starting wattages'. Add the highest one of these to your total and that will tell you what you'll need to get going and power things up.

ALWAYS choose a generator or inverter that has more capacity than you need. This is not something you can skimp on. It's likely to only be a little bit more expensive to get more capacity - whereas running your generator at full load will be inefficient, expensive and can cause damage to the generator over the medium to long term.



For **construction site and agricultural needs**, the challenges are about really identifying what you need. If you selectively turn off appliances when you don't need to charge them, then you won't need as big a generator or as much output. It makes simple sense.

DON'T FORGET about things like water pumps, home heating, and lighting if you're using your generator as backup.

If you've got a **recreational vehicle** or are **camping**, your needs will be different but the same general rules apply.

AROUND THE HOME

Item:	Starting wattage	Running wattage
Breville 2 slice Toaster	933	933
Breville 1000W Blender	851	161
Breville Juicer 450W	1334	230
Panasonic LCD TV 32"	48	48
Omas 1000W		
Oil Column Heater	897	897
Maxim Hair Dryer	1863	1794
Homemaker Deep Fryer	2024	2024
Zip Rice Cooker ZIP216	644	644
Aspira 200L Chest Freezer	897	897
Shark Navigator Vacuum	2944	966
Rocket Espresso Machine	1380	1104
Mazzer Mini		
Coffeebean Grinder	276	161
Ronson RK110 Kettle	1978	1978
Sanyo EM-S230		
1400W Microwave	1472	1472
Panasonic NN-S554WF		
1100W Microwave	1909	1909
Elba ER80WHI Fridge	736	115

Heat Pumps

Item:	Starting wattage	Running wattage
Panasonic 8.0kW		
AERO CS/CU-Z80TKR	2410	2410
Hitachi 6.0kW		
RAS-50YHA4	1550	1550
Toshiba 5.5kW		
RAS-16G2KVP-A	1750	1750
Mitsubishi 9.0kW		
MSZ-GE80VAD-AI	2550	2550
Daikin 3.5kW FTXM35RVMZ	870	870
Fujitsu 7.2kW ASTG22KMCA	1590	1590

Welders

MMA/TIG DC INVERTER WELDERS

XCEL-ARC VIPER ARC140DC Inverter Welder	6500
XCEL-ARC VIPER ARC160DC Inverter Welder	10800
RazorWeld ARC160PFC MMA/TIG DC Inverter Welder	7350
XcelArc RazorWeld 180 MMA/TIG DC Inverter Welder	10800
RazorWeld ARC200PFC MMA/TIG DC Inverter Welder	9900

TIG/MMA DC INVERTER WELDERS

XCEL-ARC VIPER TIG200P DC Inverter Welder	10950
XcelArc TIG200P Razorweld DC Pulse Digital Inverter Welder	12300

TIG/MMA ACDC INVERTER WELDERS

XCEL-ARC VIPER TIG180 ACDC Inverter Welder	10650
XcelArc TIG200PXP AC/DC Inverter Welder	5800
XA RAZORWELD TIG200 COMPACT ACDC	10650

MIG MULTI FUNCTION INVERTER WELDERS

XcelArc Viper MIG120 Synergic Mig Inverter Welder	6300
XcelArc Viper MIG185 MIG/MMA Inverter Welder	10650
XcelArc MIG200 RazorWeld MIG/MMA Inverter Welder	14100
RazorWeld MIG205 Smart Set MIG/TIG/MMA Inverter Welder	14100
XcelArc Mig/Tig/Stick Welder 200A - 230v Single Phase	13200
RazorWeld MIG250C MTS Inverter Welder	18900
RazorWeld MIG250D Digital MTS Inverter Welder	18900
RazorWeld MIG250W MTS Inverter Welder 230V Single Phase	18000

INVERTER PLASMA CUTTERS

XA VIPER CUT30 Plasma Cutter	6900
XA RAZORCUT45 Plasma Cutter	7950

Item:	Starting wattage	Running wattage
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Water Pumps

JSWm IOM IHP	2748	989
6" Submersible 28M	4036	414

Power Tools

Metabo LF 724 S		
Paint Stripper	1896	408
Dewalt DW735XE		
Thicknesser	4899	1426
Reinholt Aquajet160		
Water Blaster	3289	1150

Hedge Trimmers

Metabo HS 8745	1392	288
Black & Decker GT4245-XE	886	322
Bosch AHS 45-16	966	299
Flymo EASICUT600XT	1219	311
Makita UH5261	920	253

AROUND THE FARM

Item:	Starting wattage	Running wattage
Electric fence (25k)	250	250
15amp Battery Charger	380	380
Milk cooler	1800	1100
Milker (vacuum pump)2hp	2300	1000

Generator KW Ratings for Single Phase 230V Machines

Starting Wattage

POWER TOOL REQUIREMENTS

Item:	Starting wattage	Running wattage		
Impact Drills				
Makita HP2010N	1058	276		
Hikoki DV20VD	1449	391		
Metabo SBE 850-2 Impact Drill	1728	336		
Hammer Drills				
Metabo KHE 96 Demolition Hammer	2424	912		
Makita HR2811FT	1564	391		
Hikoki DH228PCY	1771	366		
Dewalt D25133K XE	1449	414		
Bench Grinders				
Tooline BG152	456	144		
Tooline BG201	816	156		
Tooline BG203	1980	216		
Drill Presses				
Tooline DP104B Drill Press	984	240		
Tooline DP126B Drill Press	1176	264		
Tooline DP176F Drill Press	1968	360		
Tooline DP255F Drill Press	3888	828		
Ozito DP-350 Drill Press	690	195		
Bosch PBD40	644	299		
Metal Linishers				
Tooline MS100	5304	720		
Tile Cutters				
Tooline TC180	1440	180		
Tooline TC250	6024	864		
Sanders				
Metabo SXE 425				
Random Orbital Sander	744	312		
Metabo BAE 75 Belt Sander	1440	720		
Tooline BD46C Belt & Disc Sander	2520	336		
Makita BO5041 Random Orbital	644	230		
Dewalt DWE6423-XE Random Orbital	621	253		
Bosch GEX125-1AE Random Orbital	621	253		
Hikoki SV13YB Random Orbital	598	207		
Stanley FME440K-XE Random Orbital	1150	345		
Jigsaws				
Metabo STEB 140 Plus	624	384		
Makita 4329K	759	161		
Bandsaws				
Tooline B5240 Bandsaw	984	192		
Tooline BS315A Bandsaw	2280	576		
Abrasive Cutoff Saws				
Metabo CSS 23-355 Cutoff saw	7848	1272		
Dewalt D28715XE	5152	1150		
Drop Saws				
Tooline CS210 Crosscut saw	3408	648		
Tooline CSS254 Crosscut saw	5400	768		
Metabo CSS 23-355 Cutoff saw	7848	1272		
Ryobi EMS1825SCL Drop Saw	5060	690		
Black & Decker SMS500-XE	6049	1035		
Bosch PCM 1800	5966	920		
Hikoki C12RSHZ	5221	1035		
Makita LS1216L			3795	644
Dewalt DWS780 XE			5635	1380
Dewalt DW717 XE			5566	1104
Metabo KGS216			3841	690
Dewalt DW713-XE			5382	989
Hikoki C10FCE2			5451	920
Table Saws				
Tooline TS250			5688	864
Tooline TS251			4752	888
Black & Decker BT2504AE			5727	1150
Makita MLT100			1702	782
Dewalt DWE7491 XE			4945	966
Workshop Vacuums				
Nilfisk ATTIX M-Class			1320	1058
Karcher NT35/1			3818	1265
Starmix NSGADL1435EHP			1794	1288
Metabo ASR 35			2254	1265
Karcher PRONT400			3634	1265
Karcher WD6P Premium			1748	1403
Nilfisk Aero 26 21PC			2967	1081
INGCO CLVA1950			3289	1058
Heat Guns				
Black & Decker KX1650A-XE			1633	1610
Bosch PHG500-2			1472	1426
Hikoki RH600T			184	61
Dewalt D26414-XE			161	161
Makita HG6020			1909	1288
Bosch PST800PEL 1			196	333
Stanley FME340K-XE			1196	345
Hikoki CJ90VST			1656	345
Sabre Saws				
Bosch PSA1150			2530	713
Dewalt DWE305PK-XE			1943	690
Makita JR3050T			2093	598
Hikoki CR13VB			2185	483
Angle Grinders				
Metabo WE 24-230 MVTQ			3384	1296
Metabo WPB 12-125			3000	648
Hikoki G13YC2			1771	575
Dewalt o28136			1748	828
Makita GA5030K			1288	345
Stanley FME812K-XE			2139	483
Black & Decker KG1200-XE			3220	598
Circular Saws				
Metabo KS 55 FS			3192	648
Makita HS7600SP			2599	379
Hikoki C7SB2			4991	690
Dewalt DWD575-XE			3197	713
Compressors				
Tooline AC2025			4080	1200
Tooline AC2041			4680	1104
Tooline AC2551			4968	1440
Tooline CCS50/360			9600	2040
Puma 17			13800	1955

PLEASE NOTE THAT THESE FIGURES ARE A GUIDE ONLY. CHECK YOUR APPLIANCE OR EQUIPMENT FOR THE ACTUAL RUNNING AND STARTING WATTAGES AS SPECIFICATIONS, ALTHOUGH WE HAVE MADE EVERY EFFORT TO ENSURE THEY ARE CORRECT AT THE TIME OF PRINTING, MAY CHANGE.

FEATURE COMPARISON CHART

Model	HY22i	PG3300Ei	HY30i	PG4000i	HY40Ei	PG7001Ei	
Maximum output	2.2kW	3.3kW	3.2kW	4.0kW	4.0kW	7.0kW	
Rated power	2.0kW	3.0kW	2.8kW	3.6kW	3.6W	6.5kW	
Amps (MAX)	7	12	12	15.9	16.5	28.3	
Noise Level dBa	61	74	60	71	60	74	
Starting Method	RECOIL	ELECTRIC	ELECTRIC	RECOIL	ELECTRIC	ELECTRIC	
Fuel Type	91	91	91	91	91	91	
Fuel Tank Capacity (L)	3.8	12.5	7.4	9	9	25	
Dimensions:							
Length	510	528	580	605	592	710	
Width	280	420	508	447	575	680	
Height	455	440	450	487	500	620	
Inverter	YES	YES	YES	YES	YES	YES	
Weight	20kg	35kg	35kg	35kg	50kg	80kg	
	HY22i	PG3300Ei	HY30i	PG4000i	HY40Ei	PG7001Ei	

PG28

2.8kW

2.5kW

12.2

67

RECOIL

91

15

610

460

510

43kg

PG28

PG2801E

2.8kW

2.5kW

12.2

67

ELECTRIC

91

15

610

460

510

48kg

PG2801E

PG3601E

3.6kW

3.3kW

13.9

67

ELECTRIC

91

15

610

460

460

52kg

PG3601E

PG6501E

6.5kW

6.0kW

27

72

ELECTRIC

91

25

700

560

570

77kg

PG6501E

PG9001E

9.0kW

8.0kW

34.7

90

ELECTRIC

91

25

710

554

610

98kg

PG9001E

DG6700E

6.7kW

6.3kW

26.1

84

ELECTRIC

DIESEL

15

730

500

670

108kg

DG6700E

TLD10E

9.0kW

8.0kW

34.8

92

ELECTRIC

DIESEL

25

900

600

810

208kg

TLD10E



TOOLINE®

**YOUR GUIDE
TO OUR WIDE
RANGE OF TOP
GENERATORS
& INVERTERS**

Which model is best for you?

**CHECK OUT OUR GREAT VALUE
LINEUP OF POPULAR MODELS**

www.tooline.co.nz



TOOLINE[®]

ABOUT TOOLINE:

Tooline is one of New Zealand's most trusted names in powertools and generators. It's a locally owned and operated company with connections around the world, known for dependable products. Look for the Tooline name for the equipment that's right for you.



BUILT TO PERFORM, SUPPORTED BY US.

There are often lots of choices, but you don't always know who, how or what to choose. However, with a brand like ours, you can trust the name.

Tooline promises great performance at a really good price. We carefully source our products from the best manufacturers and work alongside them to make sure everything does what it says and works the way it's meant to.

If, on a rare occasion, things do go awry, and let's face it - life's full of surprises, we're here with a solution and support.

It means you can trust the Tooline brand. We're immensely proud of our hard-won reputation in the marketplace and have built it the old fashioned way, over decades of simply delivering what we promise.

Choose wisely and choose us.



OUR MOST POPULAR MODELS:



PG3300Ei PETROL INVERTER

Max. output	3.3kW
Rated output	3.0kW
Fuel capacity	12.5L
Displacement	208cc
Start Method	Electric & Recoil
Weight	35kg

Max. output	7.0kW
Rated output	6.5kW
Fuel capacity	25L
Displacement	420cc
Start Method	Electric & Recoil
Weight	80kg

PG7001Ei PETROL INVERTER



ALL MODELS BACKED BY OUR TOOLINE WARRANTY ✓

Our generators are guaranteed for 1 year (or 200 hours) from the date of original retail purchase. Conditions apply. Ask for details.

You can trust Tooline to source top quality models, with reliable, proven

performance that matches published specifications and the promise of local, genuine after-sales support.

We stand behind our products because we know they perform.

PETROL INVERTER GENERATORS

HY22i PETROL INVERTER

Max. output	2.2kW
Rated output	2.0kW
Fuel capacity	3.8L
Displacement	98cc
Start Method	Recoil
Weight	20kg



PG3300Ei PETROL INVERTER SEE PREVIOUS PAGES

Max. output	3.2kW
Rated output	2.8kW
Fuel capacity	7.4L
Displacement	208cc
Start Method	Electric & Recoil
Weight	35kg

HY30i PETROL INVERTER



PG7001Ei PETROL INVERTER

SEE PREVIOUS PAGES

THERE'S A GENERATOR HERE TO SUIT YOU...

PG 4000i

PETROL INVERTER

Max. output	4.0kW
Rated output	3.6kW
Fuel capacity	9L
Displacement	208cc
Start Method	Recoil
Weight	35kg



HY40Ei

PETROL INVERTER

Max. output	4.0kW
Rated output	3.6kW
Fuel capacity	9L
Displacement	223cc
Start Method	Electric & Recoil
Weight	50kg

PETROL OPEN FRAME GENERATORS

PG28 PETROL OPEN FRAME GENERATOR



Max. output	2.8kW
Rated output	2.5kW
Fuel capacity	15L
Displacement	212cc (7Hp)
Start Method	Recoil
Weight	43kg

PG2801E PETROL OPEN FRAME GENERATOR



Max. output	2.8kW
Rated output	2.5kW
Fuel capacity	15L
Displacement	212cc (7Hp)
Start Method	Electric & Recoil
Weight	48kg



PG3601E PETROL OPEN FRAME GENERATOR

Max. output	3.6kW
Rated output	3.3kW
Fuel capacity	15L
Displacement	223cc
Start Method	Electric & Recoil
Weight	52kg



PG6501E PETROL OPEN FRAME GENERATOR

Max. output	6.5kW
Rated output	6.0kW
Fuel capacity	25L
Displacement	420cc
Start Method	Electric & Recoil
Weight	77kg

PG9001E PETROL OPEN FRAME GENERATOR

Max. output	9.0kW
Rated output	8.0kW
Fuel capacity	28L
Displacement	440cc
Start Method	Electric & Recoil
Weight	98kg



*ATS AVAILABLE FOR PG 9001E

DIESEL OPEN FRAME GENERATORS



DG6700E DIESEL OPEN FRAME GENERATOR

Max. output	6.7kW
Rated output	6.3kW
Fuel capacity	15L
Displacement	498cc Lifan
Start Method	Electric & Recoil
Weight	108kg



TLD10E DIESEL OPEN FRAME GENERATOR

Max. output	9.0kW
Rated output	8.0kW
Fuel capacity	25L
Displacement	954cc
Start Method	Electric
Weight	208kg

PRIME POWER DIESEL GENERATORS



DPP9 PRIME POWER DIESEL GENERATOR

Max. output	8.8kW
Rated output	8.0kW
Voltage	240V
Fuel capacity	42L
Displacement	1357cc
Weight	480kg

BUILT TO ORDER:

We can supply prime power generators from 5KVA to 2000KVA. They offer a series of engines and a number of alternator and controller options to suit your specific needs. Typical uses include back-up for dairy shed, power-off grid situations and essential building backup. Talk to us today.