## Robin

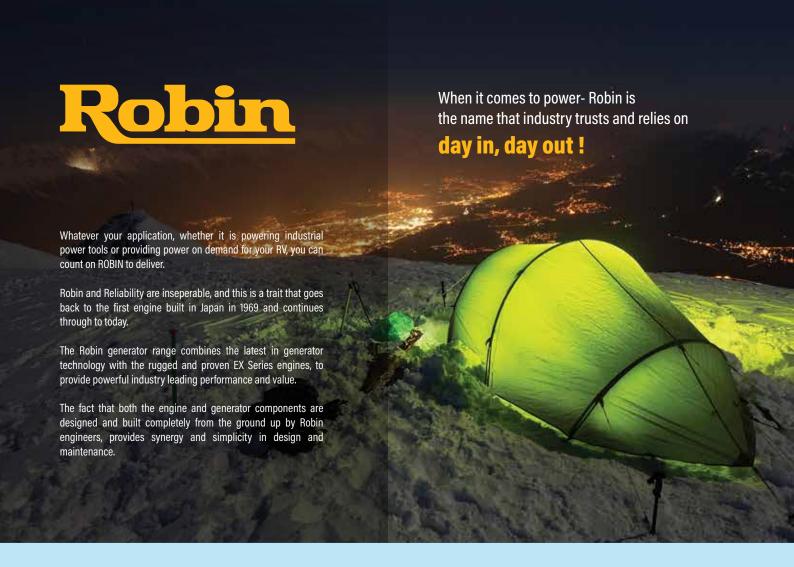
# **Portable Generator Series**

A Legacy of innovation & rugged reliability

since 1969



Silenced Inverter Open Frame Inverter AVR Series





### **Insist on the Robin performance package:**

- Less recoil pulling force, an electronic ignition system and automatic decompression means easy starting every time and at every temperature.
- High power and torque, extended running times and high compression ratio ensure maximum power and premium performance in the most demanding applications.
- Cast-iron cylinder liners, high carbon steel crankshaft, steel ball bearings and electronic low oil shut-off maximize engine life with minimum maintenance.
- Service dealers throughout NZ and a premium three year warranty.
- Low oil alert sensors incorporated to protect your investment.
- Extra large soft tone tuned mufflers for quiet running.
- All Robin engines meet or exceed the strictest EPA emissions standards for environmentally friendly operation.



Every ROBIN machine is backed by a premium **3 year warranty** that gives you peace of mind in your investment.

Our products are built to go the distance and with over 50 years of proven performance. (You wont be disappointed)

Reliability - Dependability - Serviceability - It all combines to underwrite the ROBIN advantage.

# ROBIN FEATURES AND TECHNOLOGIES

Robin generators have many innovative benefits and technologies, to maximise performance whatever the environment and application. The following symbols have been designed to help you choose the right generator for your needs. Look for these symbols on the model pages.



#### OIL ALERT™

Prevents engine damage by automatically shutting the unit down if the oil drops below a safe operating level.



### **EXTENDED RUN TIME**

Model features a larger fuel tank for longer continuous operation.



#### DC OUTPUT

Provides up to 12A for battery charging (optional cable required).



### TRANSPORT WHEELS

Smooth and stable wheel attachments allow a single user to easily manoeuvre the unit.



### LIGHTWEIGHT

For superb portability in any situation, with easy transportation and storage.



### **LOW-NOISE DESIGN**

Noise-reducing muffler to lower operational noise.



### **ELECTRIC START**

Key operated electric start for effortless operation.



### **DIGITAL MONITOR**

Monitors output performance as well as self-diagnostics and servicing information.



### **ECO-MODE**

Automatically adjusts the engine speed to precisely match the load, to save fuel, extend engine life and give quieter operation.



### ENHANCED ANTI-VIBRATION SYSTEM

Our industrial rubber engine mounts give superior vibration damping compared to industry standard straight rubber mounts.



### HIGH DUST AND WATER PROTECTION

Model features a high level of dust and water protection (IP54 category compared to the standard IP23 category).

### **CONVERTING AMPS TO WATTS**

Multiply the amperage listed on the compliance plate by the voltage of the mains electrical system (230 volts). For example, a 5 amp appliance requires 1150 watts to run (5 x 230).

### START-UP POWER

As mentioned above, appliances with electric motors such as drills, sanders, polishers and power saws need an extra "boost" of watts at start-up. This can be substantially higher than the operating figure printed on the compliance plate, and depends on the type of motor. Split Phase Motors require 8 to 10 times their rated power for start-up and Capacitor Motors need 4.5 times their rated power to start. The more common Series Motors need 1.5 times their rated power to start up. If you are unsure, check with the appliance manufacturer.

### **RATED POWER VS KVA**

Some generator manufacturers list "KVA" as the main output of their generators, which is almost completely useless when looking at your power requirements. KVA is a theoretical output, before a calculator of "power factor" losses are deducted from the KVA figure, to arrive actual useable, "rated" KW power. ie: If an output figure of 5 KVA is being stated, then the likely power available is around the 4 KW mark. That is why we work with real KW figures. If a Robin machine is listed as outputting 2 KW, this will be the true available power output.





## How much **power** do I need?

How do you determine what size generator you need? Sizing a portable generator is relatively easy. Check out the example below:

- Choose which devices you want to power at the same time.
- Record and add the running watts listed for each tool or appliance that you need to power.
- Record the starting watts listed for each tool or appliance.
- Select the ONE device with the highest starting watts. Add that number to the the total running watts to determine the total wattage requirement.

Device	Running Watts	Additional Starting Watts	Gen
Circular Saw	1400	2300	Minimu
Light Bulb	100	0	for
Refrigerator	700	2200	
Well Pump	1000	2100	
Total	3200	+ 2100 =	530



### **RUNNING WATTS**

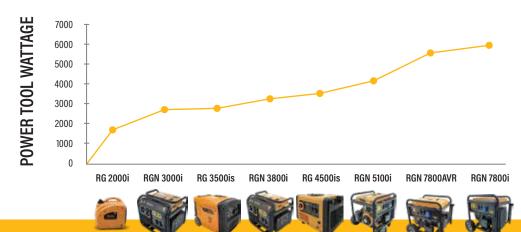
refers to the amount of current needed to keep a motor running.

### STARTING WATTS

refers to the amount of additional current required to get the motor up to speed when it is first started up.

### **WATTAGE GRAPH**

Use this graph as a guideline to help select the right size generator to run your equipment and tools. Check the wattage required as shown on the label of your appliances before you choose a generator.



### **WATTAGE CHARTS - Calculate your power requirements**

# HOUSEHOLD

Device	Running Watts	Additional Starting
Coffee Maker	1500	-
Computer with a 17" Monitor	800	-
Electric Clothes Dryer	5750	-
Electric Oven	2100	-
Electric Water Heater	2400	-
Garage Door Opener-1/2 HP	875	2350
Hair Dryer - 1250 Watt	1250	-
Light Bulb - 100 Watt	100	-
Microwave - 1000 Watts	1000	-
Refrigerator/Freezer	700	2200
Security System	500	-
Sump Pump 1/2 HP	1050	2150
Sump Pump 1/3 HP	800	1300
Television - 27"	500	-
Toaster	1200	-
Washing Machine	1150	2300
Well Pump - 1/2 HP	1000	2100
Well Pump - 1/3 HP	750	1400



Device	Running Watts	Additional Starting
AM/FM Radio	100	-
Blender	400	450
Box Fan - 20"	200	-
CD / DVD Player	100	-
Cell Phone Battery Charger	25	-
Color TV - 42"	200	-
Electric Grill	1650	-
Inflator Pump	50	150
Outdoor Light String	250	-
RV Air Conditioner (13,500 BTU)	1500	700
Slow Cooker	250	-

Wattage listed is approximate. Check appliance for actual requirements. Total wattage requirements assumes intermittent starting of devices.

# LAWN & GARDEN Device Running Additional Starting Watter Starting Watter

Device	Running Watts	Additional Starting Watts
Electric Hedge Trimmer	400	-
Electric Lawn Mower	1200	-
Electric Line Trimmer - 9"	350	-
Electric Edger	960	-
Electric Chain Saw - 12" (1/2HP)	900	-

JOBSITE		
Device	Running Watts	Additional Starting Watts
Air Compressor - 1 HP	1600	4500
Air Compressor - 1/2 HP	1000	2000
Airless Paint Sprayer- 1/3 HP	600	1200
Belt Sander - 3"	1200	2400
Bench Grinder - 8"	1400	1100
Circular Saw - 7-1/4"	1400	2300
Hand Drill - 1/2"	600	900
Hand Drill - 3/8"	400	600
Miter Saw - 10"	1800	1800
Quartz Halogen Work Light	1000	-
Reciprocating Saw	960	-
Table Saw, 10"	2000	2000

HEATING & C	COOLING	
Device	Running Watts	Additional Starting Watts
Central AC - 10,000 BTU*	1500	3000
Central AC - 24,000 BTU*	3800	4950
Heat Pump	4700	4500
Humidifier - 13 Gal.	175	-
Fan Heater	2000	-

\* Hard wired appliances require a professionally installed transfer switch for use with a portable generator.



### **Power and Performance**

### **Efficient Power Creation**

While conventional generators produce one AC sine wave per engine rotation, Robin inverter generators create more than 300 AC sine waves per rotation. More electrical power is produced by Robin inverter generators from each engine rotation than any other machine.



Typical generator sine wave

However, the power produced must first be changed to the form needed to power electrical

appliances. This conversion is performed in two steps within the Robin inverter module. First, the electrical power is converted to DC power. The the DC power in inverted by the cutting edge

electronics of the inverter module to output perfectly clean 240-Volt, 50-Hz AC power.



inverter generator sine wave



### Step 1

Generator produces three - phase AC power at up to 20,000 Hz



### Step 2

Generator converts the AC power to DC power



### Step 3

Generator converts the DC power to clean AC power at exactly 240 Volts/50 Hz

### Why Inverter?

Inverter generators are unlike any other. These units produce power in a different manner - the end result is often referred to as "clean or perfect power". This type of power is stable and free of potentially harmful voltage surges, which is why they are ideal and recommended for running electronic appliances and power tools. Robin inverter modules contain cutting edge micro processor technology to provide perfect power that is even better than your power at home!



RUGGED

So rugged you'll quickly find Robin is the hardest working member of your crew or your household. Here's why we're confident in our generators longevity and performance:

- High surge capacity allows for output as high as 120 percent over rated power for up to 20 seconds
- Easy starting for demanding appliances and equipment, from RV air conditioners to air compressors and power tools
- Embedded heat sensors monitor critical components and shut off the power output when an overload condition is sensed

UET

- A fully enclosed design with sound attenuating resin panels featuring foam lining and a steel base equipped with sound absorbing lining
- · Three-layer fuel tank
- Auto-Power System adjusts the engine speed to meet power requirement
- Extra large mufflers for quiet and efficient running

**ECHNOLOGY** 

The new inverter technology by Robin offers you a new way to reach your power objectives - a clean, safe and quiet alternative. Here's what inverter generators have to offer:

- Clean and stable power for sensitive electronic equipment, including computers, household electronics and electronic tools
- A lighter and more compact generator design
- Increased efficiency, which reduces fuel consumption, extending time between refueling

ORTABLE

With designs and technology in materials allowing up to 40% lighter weight than traditional machines, the silenced inverter series provides the ultimate in portabilty.





### **SILENCED INVERTER SERIES**



Maximum Output	2000W
Rated Output	1600W
Weight	20kg
dBA @ 7m	58

The super portable RG 2000i is designed for life on the road and provides pure sine wave power for powering laptops, TVs, powertools, lighting and anything with sensitive electronics. The convenient control panel provides eco mode selection, fuel on/off switch and 12V charging capability. The 3.6L fuel tank provides up to 7 hrs of continuous running.





Maximum Output	3200W
Rated Output	2800W
Weight	40kg
dBA @ 7m	63

The RG 3500is inverter generator provides a powerful 3200W (max) of perfect sine wave power, yet remains exceptionally compact. The RG 3500is features electric start for effortless starting, LED engine function display, 12V charging capability and twin 15A outlet sockets. The 7.8L fuel tank provides up to 7 hrs of continuous running. The compact size and 40 kg weight allow easy transportation.























Maximum Output	4300W
Rated Output	3800W
Weight	50kg
dBA @ 7m	66

The RG 4500is inverter generator provides serious pure sine wave power with up to 4300W (max) capability. Ideal for food carts, construction sites, events and any serious power requirements. The LCD generator function display informs of output status, running hours and safety alerts. The electric start allows effortless starting. The eco mode switch saves fuel by matching the engine speed to the required load. The 9L fuel tank, with handy fuel guage, provides for up to 8 hrs continuous use.















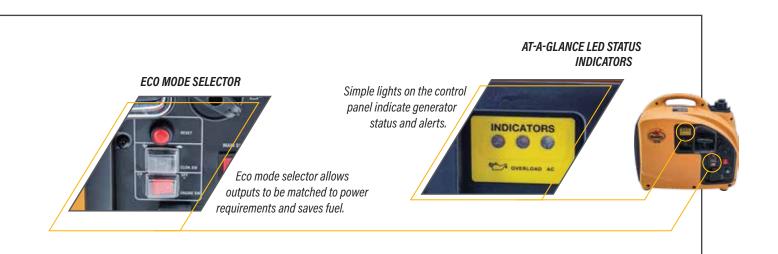


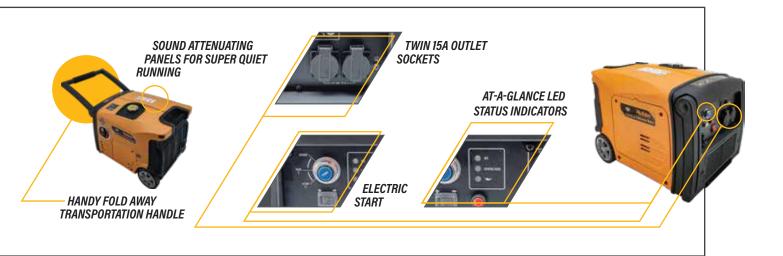


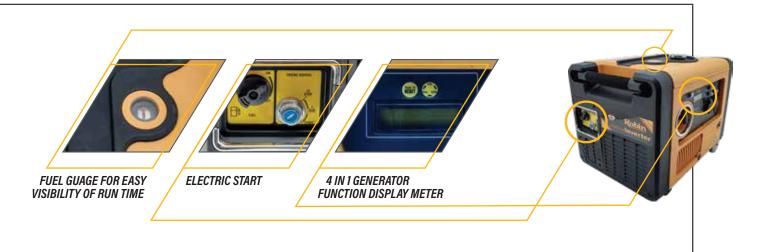




When it comes to fuel efficiency, portability and quiet running, the silenced inverter series are second to none!









# OFI INVERTER SERIES

**RGN 3000i** 



3000W
2400W
35kg
68

The RGN 3000i is supremely portable, weighing in at only 35 kg and the wrap around roll cage frame provides easy lifting points with 3000W (max) of pure sine wave power output. The RGN 3000i will boil the jug, run your laptop, lights and more. The convenience of electrical start rounds off this rugged performer's substantial features list.

# **3800i**



Maximum Output	3800W
Rated Output	3000W
Weight	37kg
dBA @ 7m	70

The RGN 3800i offers a powerful 3800W (max) pure sine wave power output, yet is still one man lift capable at just 37kgs. The compact sizing and convenient electric start make this machine perfect for critical power requirements on site or at home.

# **RGN 5100i**





























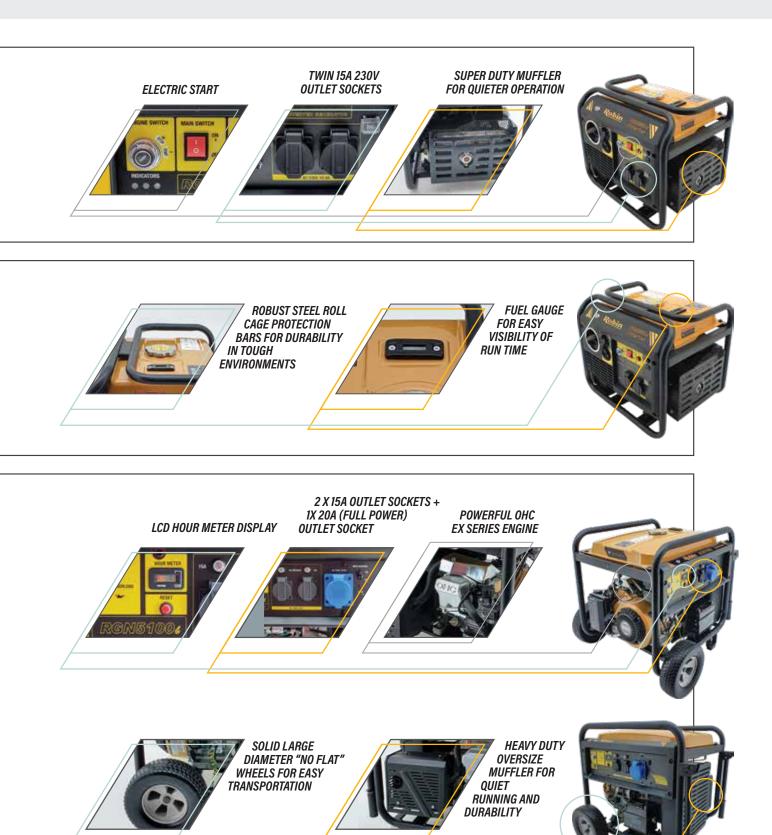
Maximum Output	5100W
Rated Output	4200W
Weight	85kg
dBA @ 7m	72

The RGN 5100i, wih its long range 25L fuel tank allowing up to 9 hrs run time, is the perfect machine for backup power, whether on site or at home. With the convenient heavy duty wheel kit, this machine can be easily transported to provide perfect pure sine wave at any location. The multi-monitor LCD display advises power output parameters, engine status and running hours.

Maximum Output	7800W		
Rated Output	6000W		
Weight	88kg		
dBA @ 7m	76		

The RGN 7800i is the "big daddy" of the OFI inverter series, with an impressive 7800W (max) output of pure sine wave power. Powered by the bulletproof and super powerful EX40 industrial engine, this machine will provide perfect power week in, week out. The built in "Full power" socket allows the full power output of 7800W to be accessed for backup power.

The strong performance and rugged design of the open frame inverter series, coupled with the perfect sine wave power output is ideal for construction sites and home backup.



### **AVR INDUSTRIAL SERIES**

The traditional style AVR series generator offers rugged reliability and performance and is ideal for worksites and basic power requirements.



Maximum Output	6700W		
Rated Output	5500W		
Weight	89kg		
dBA @ 7m	76		

The RGN 7800 AVR machine provides rugged reliability and power on demand, and will perform in the toughest of environments. With a strong 6700 W output and three power sockets, including a full power outlet port, the RGN 7800 AVR has got your worksite power requirements covered. The electric start function and handy built-in hour meter ensure you are in control and up and running at the flick of a switch. The heavy duty "no flat" wheel kit and fold away handles offer excellent portability.















**ELECTRIC START WITH** KEY PROTECTION **COVER** 



12V DC OUTPUT



**BULLETPROOF ROBIN EX40 ENGINE** 



**FULL COPPER OVERSIZE** ALTERNATOR BUILT TO WITHSTAND THE **TOUGHEST OF TESTS** 



HEAVY DUTY OVERSIZE **MUFFLER FOR QUIET RUNNING AND DURABILITY** 



### **AUTOMATIC VOLTAGE REGULATOR**

An Automatic Voltage Regulator (AVR) system allows finer voltage control for steady output and less fluctuations. The system uses electronics to continuously monitor voltage output and provide the accurate control necessary to power more sensitive equipment.



Designed for the demands of contractors, homeowners and recreational users, Robin machines are built to withstand even the most demanding applications. With features like this, we're sure you'll understand why.

- High surge capacity allows for output as high as 150 percent over rated power for up to 20 seconds
- · Easy starting for demanding appliances and equipment, from air compressors and submersible pumps to refrigerators and power tools
- Heavy-duty electrical components feature copper windings with high-temperature insulation
- Large ball-bearing-supported rotor assemblies
- · Solenoid actuated AC circuit breakers provide reliable overload protection
- · Heavy-duty SAA Power outlets
- Industrial-grade Subaru engines
- Tough steel construction with large steel fuel tanks featuring zinc plating for longevity in all environments
- Full 3-year Limited Warranty on commercial, residential or recreational applications

Exceptional performance in the most rigorous applications. It's easy to see why:

- · Automatic decompression, easy-pull recoil starter, and high energy electronic ignition system provide reliable easy starting
- · Clean and stable power output
- Extra large fuel tanks with fuel gauges provide a long run time
- · High efficiency Robin engines consume less fuel and increase run time
- Full power socket provided allows full power connection to one outlet

Though not as quiet as our inverter generators, Subaru has always been known for a durable design with minimal noise. Here's why:

- · Quiet mufflers
- Sound-suppressing industrial air cleaners
- · Oversize antivibration mounts for smooth running

# Robin GENERATORS

# AVR INDUSTRIAL SERIES



### **SILENCED INVERTER SERIES**







	Model			RGN7800	RG2000i	RG3500is	RG4500is
	Frequency-Rated Voltage		50-220, 50-240 60-110/220, 60-120/240	50Hz-100-120V; 60Hz-100-120V 50Hz-220-240V; 60Hz-220-240V			
~	(VA) AC Output	Max	50Hz	6700	50Hz-220-240V; 60Hz- 220-240V	3200	4300
GENERATOR	(VA)	Rated	50 Hz	5500	1600	2800	3800
GENE	Power Factor		1.0	1.0			
	DC Output (V-A)		12-8.3	12-5.0			
	Safety Device	Safety Device Type		Fuse-less circuit breaker	Fuse-less circuit breaker		
	Model			EX40	148F	EX21	170FB
	Engine Type			Air-cooled, 4-stroke, OHC, Gasoline engine	Air-cooled, 4-stroke, OHC, Gasoline engine		
	Displacement (mL)		404	79.7	211	225	
ENGINE	Fuel			Automotive, unleaded gasoline	Automotive, unleaded gasoline		
ENG	Fuel Tank Capacity (L)		16	4.2	7.8	9.0	
	Engine Oil Capacity (L)		1.2	0.41	0.6		
	Starting System			Recoil starter/Electric starter	Recoil starter	Recoil starter/Electric starter	
	Rated Contine Hours (h)	uous Ope	erating	4.8	5.0	7.0	8.0
Dimensions LxWxH (mm)				725x534x580	507x286x451	540x405x420	405x447x487
Net Weight (kg)				69	20	40	50

### **OFI INVERTER SERIES**











	Model			RGN3000i	RGN3800i	RGN5100i	RGN7800i
	Frequency-Rated Voltage			50Hz-100-120V; 60Hz-100-120V 50Hz-220-240V; 60Hz-220-240V			
~	(VA) AC Output (VA)	Max	50Hz	3000	3800	5100	7800
GENERATOR		Rated	50 Hz	2400	3000	4200	6000
GENE	Power Factor		1.0				
	DC Output (V-A)			12-5.0			
	Safety Device Type			Fuse-less circuit breaker			
	Model			EX17	EX21	EX30	EX40
	Engine Type			Air-cooled, 4-stroke, OHC, Gasoline engine			
	Displacement (mL)			169	211	287	404
岁	Fuel			Automotive, unleaded gasoline			
ENGINE	Fuel Tank Capacity (L)			12.5	12.5	25.0	25.0
	Engine Oil Capacity (L)		0.6		1.2		
	Starting Syste	Starting System		Recoil starter/Electric starter			
	Rated Continuous Operating Hours (h)		9.0	8.5	9.0	7.5	
Dimensions LxWxH (mm)				528x42x455	400x450x450	785x595x630	785x595x630
Net Weight (kg)				35	35	85	85

You deserve complete confidence that you have made the right choice with your investment in a Robin generator, long after you have made the purchase. That's why we have a complete network of sales and service dealers that can provide the premium support and performance that Robin is renowned for.



Look for the "Authorised ROBIN Dealer" seal of confidence in store or call us toll free on **0800 762464**.

We also have fully trained technicians in house that perform a full PDI (Pre Delivery Inspection) on every machine and are available 24/7 for any technical questions and support.

Our technical and sales team's vast experience in power generation requirements, gained from years of first hand experience in the New Zealand market, ensure that you invest in the right machine for your job, for the long tern future.

### **Robin Generators NZ**

0800 762 464

sales@robingenerators.co.nz

