

**DEMAND RESPONSE READY**

**Standby Power Rating**

250 kW, 313 kVA, 60 Hz

**Demand Response Power Rating**

250 kW, 313 kVA, 60 Hz

**Prime Power Rating\***

225 kW, 281 kVA, 60 Hz

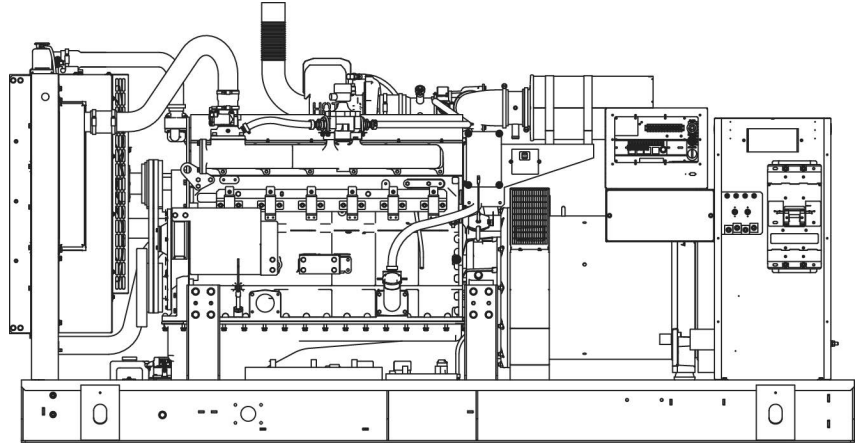


Image used for illustration purposes only



\*EPA Certified Prime ratings are not available in the US or its Territories

**Codes and Standards**

Generac products are designed to the following standards:

-   UL2200, UL508, UL489
-  CSA 22.2
-   BS5514 and DIN 6271
-  SAE J1349
-  NFPA 37, 70, 99, 110
-  NEC700, 701, 702, 708
-  ISO 3046, 7637, 8528, 9001
-  NEMA ICS10, MG1, 250, ICS6, AB1
-  ANSI C62.41
-   IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

**Powering Ahead**

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

**STANDARD FEATURES**

**DEMAND RESPONSE READY**

**ENGINE SYSTEM**

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Critical Exhaust Silencer
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Exhaust Silencer

**Fuel System**

- Fuel Line - NPT Connection
- Primary and Secondary Fuel Shutoff

**Cooling System**

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

**Electrical System**

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

**ALTERNATOR SYSTEM**

- UL2200 GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Permanent Magnet Excitation
- Sealed Bearing
- Amortisseur Winding
- Full Load Capacity Alternator

**GENERATOR SET**

- 12 Position Load Center
- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)

**ENCLOSURE (If Selected)**

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (L1 and L2)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Air Discharge Hoods for Radiator-Upward Pointing
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat

**CONTROL SYSTEM**

**Digital G-200 Paralleling Control Panel-Touch Screen**

**Program Functions**

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- 3-Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)

- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

**Full System Status Display**

- Power Output (kW)
- Power Factor
- kW Hours, Total and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature

- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

**Alarms and Warnings**

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure Alarm
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

**PARALLELING CONTROLS**

- Auto-Synchronization Process
- Isochronous Load Sharing
- Reverse Power Protection

- Maximum Power Protection
- Electrically Operated, Mechanically Held Paralleling Switch
- Sync Check System
- Independent On-Board Paralleling

- Optional Programmable Logic Full Auto Back-Up Controls (PLS)
- Shunt Trip and Auxiliary Contact

## CONFIGURABLE OPTIONS

## DEMAND RESPONSE READY

### ENGINE SYSTEM

- Flexible Fuel Line- NPT Connection
- Oil Heater
- Air Filter Restriction Indicator
- Stone Guard (Open Set Only)

### ELECTRICAL SYSTEM

- 10A UL Battery Charger
- Battery Warmer

### ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

### CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- Electronic Trip Breakers

### GENERATOR SET

- Demand Response Rating
- Gen-Link Communications Software (English Only)
- Extended Factory Testing

### ENCLOSURE

- Standard Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

### WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

### CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- 10A Run Relay
- Ground Fault Indication and Protection Functions

## ENGINEERED OPTIONS

### ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

### CONTROL SYSTEM

- Battery Disconnect Switch

### GENERATOR SET

- Special Testing
- Battery Box

### ENCLOSURE

- Enclosure Ambient Heaters
- Up to 200 MPH Wind Load Rating\*

\* Consult factory for availability

**MG250 | 14.2L | 250 kW**  
**INDUSTRIAL SPARK-IGNITED GENERATOR SET**  
 EPA Certified Stationary Emergency

**APPLICATION AND ENGINEERING DATA**

**DEMAND RESPONSE READY**

**ENGINE SPECIFICATIONS**

General

Make	Generac
Cylinder #	6
Type	In-line
Displacement - L (Cu In)	14.17 (864.71)
Bore - mm (in)	135 (5.31)
Stroke - mm (in)	165 (6.50)
Compression Ratio	9.5:1
Intake Air Method	Turbocharged/Aftercooled
Number of Main Bearings	7
Connecting Rods	Carbon Steel
Cylinder Head	Cast Iron GT250, OHV
Cylinder Liners	Ductile Iron
Ignition	Altronic CD1
Piston Type	Aluminum
Crankshaft Type	Ductile Iron
Lifter Type	Solid
Intake Valve Material	Special Heat - Resistant Steel
Exhaust Valve Material	High Temp Alloy Steel
Hardened Valve Seats	High Temp Alloy Steel

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Twin Full-flow with intercooler
Crankcase Capacity - L (qts)	34.3 (36.2)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed (rpm)	1,894
Fan Diameter - mm (in)	762 (30)
Coolant Heater Wattage	2,000
Coolant Heater Standard Voltage	240 V

Fuel System

Fuel Type	Natural Gas
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard (Dual)
Operating Fuel Pressure	7" - 11" H <sub>2</sub> O

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	(2) - 12 VDC
Ground Polarity	Negative

**ALTERNATOR SPECIFICATIONS**

Standard Model	Generac 520 mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Permanent Magnet
Bearings	Single Sealed
Coupling	Direct, Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

**OPERATING DATA**

**DEMAND RESPONSE READY**

**POWER RATINGS**

	Standby/Demand Response	
Three-Phase 120/208 VAC @0.8pf	250 kW	Amps: 867
Three-Phase 277/480 VAC @0.8pf	250 kW	Amps: 376
Three-Phase 346/600 VAC @0.8pf	250 kW	Amps: 301

**STARTING CAPABILITIES (sKVA)**

sKVA vs. Voltage Dip															
480 VAC								208/240 VAC							
Alternator	kW	10%	15%	20%	25%	30%	35%	Alternator	kW	10%	15%	20%	25%	30%	35%
Standard	250	263	395	527	658	790	922	Standard	250	197	296	395	494	593	692
Upsize 1	300	303	454	605	757	908	1,059	Upsize 1	300	227	341	454	568	681	794

**FUEL CONSUMPTION RATES\***

Natural Gas – ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	
Percent Load	Standby
25%	1,044 (29.6)
50%	1,790 (50.7)
75%	2,417 (68.4)
100%	2,983 (84.5)

\* Fuel supply installation must accommodate fuel consumption rates at 100% load.

**COOLING**

		Standby
Air Flow (Inlet Air Combustion and Radiator)	ft <sup>3</sup> /min (m <sup>3</sup> /min)	10,078 (285.4)
Coolant Flow per Minute	gal/min (l/min)	119 (450)
Coolant System Capacity	gal (l)	19 (71.9)
Heat Rejection to Coolant	BTU/hr	788,204
Inlet Air	cfm (m <sup>3</sup> /min)	9,670 (274)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H <sub>2</sub> O	0.5

**COMBUSTION AIR REQUIREMENTS**

	Standby
Flow at Rated Power cfm (m <sup>3</sup> /min)	453 (12.8)

**ENGINE**

**EXHAUST**

ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	1,961 (55.5)
Horsepower at Rated kW**	hp	374	Max. Total Exhaust Backpressure (Post Turbo)	inHg (Kpa)	0.75 (2.5)
Piston Speed	ft/min	1,949	Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,350 (732)
BMEP	psi	190			

\*\* Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

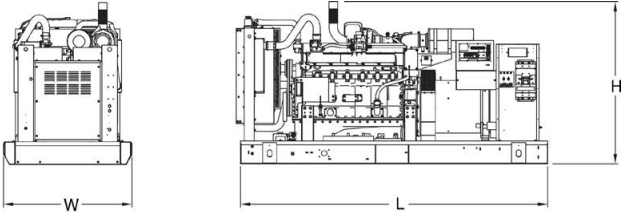
Standby - See Bulletin 0187500SSB

Demand Response - See Bulletin 10000018250

Prime - See Bulletin 0187510SSB

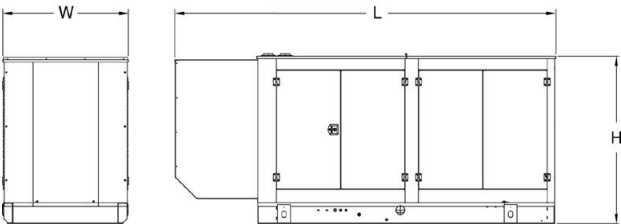
**DIMENSIONS AND WEIGHTS\***

**DEMAND RESPONSE READY**



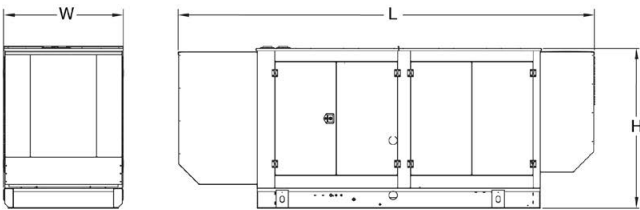
**OPEN SET (Includes Exhaust Flex)**

L x W x H in (mm)	138.74 (3,524.1) x 57.6 (1,463.1) x 68.04 (1,728.3)
Weight lbs (kg)	6,031 (2,736)



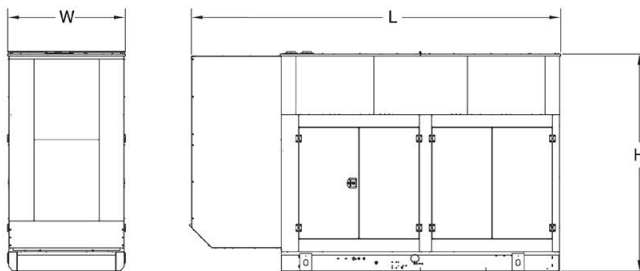
**STANDARD ENCLOSURE**

L x W x H in (mm)	174.7 (4,437.4) x 52.98 (1,345.7) x 77.8 (1,976.1)
Weight lbs (kg)	Steel: 7,596 (3,445) Aluminum: 6,801 (3,085)



**LEVEL 1 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	200.19 (5,084.7) x 57.49 (1,460.4) x 77.80 (1,976.1)
Weight lbs (kg)	Steel: 8,059 (3,655) Aluminum: 7,000 (3,175)



**LEVEL 2 ACOUSTIC ENCLOSURE**

L x W x H in (mm)	180.65 (4,588.4) x 57.49 (1,460.4) x 107.3 (2,725.4)
Weight lbs (kg)	Steel: 8,632 (3,915) Aluminum: 7,247 (3,287)

\* All measurements are approximate and for estimation purposes only.

<b>YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER</b>

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.