GENERAC® | INDUSTRIAL POWER

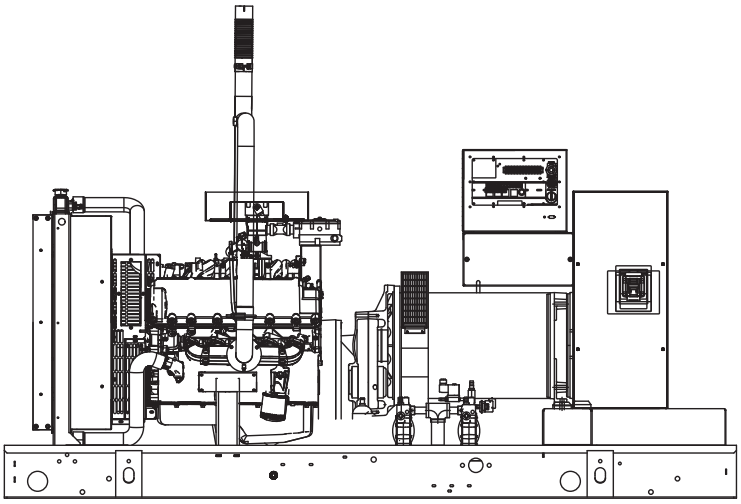
SG130

Industrial Gaseous Generator Set

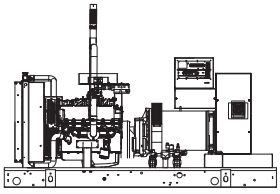
EPA Certified Stationary Emergency

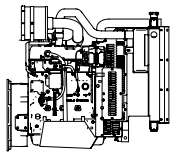
Standby Power Rating

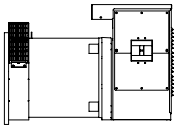
163kVA 130kW 60 Hz

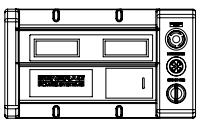


Generator image used for illustration purposes only









features benefits

Generator Set	
• PROTOTYPE & TORSIONALLY TESTED	▸ PROVIDES A PROVEN UNIT
• UL2200 TESTED	▸ ENSURES A QUALITY PRODUCT
• RHINOCOAT PAINT SYSTEM	▸ IMPROVES RESISTANCE TO ELEMENTS
• WIDE RANGE OF ENCLOSURES	▸ PROVIDES A SINGLE SOURCE SOLUTION
Engine	
• EPA COMPLIANT	▸ ENVIRONMENTALLY FRIENDLY
• INDUSTRIAL TESTED, GENERAC APPROVED	▸ ENSURES INDUSTRIAL STANDARDS
• POWER-MATCHED OUTPUT	▸ ENGINEERED FOR PERFORMANCE
• INDUSTRIAL GRADE	▸ IMPROVES LONGEVITY AND RELIABILITY
Alternator	
• TWO-THIRDS PITCH	▸ ELIMINATES HARMFUL 3RD HARMONIC
• LAYER WOUND ROTOR & STATOR	▸ IMPROVES COOLING
• CLASS H MATERIALS	▸ HEAT TOLERANT DESIGN
• DIGITAL 3-PHASE VOLTAGE CONTROL	▸ FAST AND ACCURATE RESPONSE
Controls	
• ENCAPSULATED BOARD W/ SEALED HARNESS	▸ EASY, AFFORDABLE REPLACEMENT
• 4-20mA VOLTAGE-TO-CURRENT SENSORS	▸ NOISE RESISTANT 24/7 MONITORING
• SURFACE-MOUNT TECHNOLOGY	▸ PROVIDES VIBRATION RESISTANCE
• ADVANCED DIAGNOSTICS & COMMUNICATIONS	▸ HARDENED RELIABILITY

primary codes and standards

NEMA · c UL us LISTED · NFPA · ASTM INTERNATIONAL · ISO · ICC

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SG130 application and engineering data

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Engine Reference	See Emissions Data Sheet
Cylinder #	10
Type	V
Displacement - L (Cu. In.)	6.8 (414.96)
Bore - mm (in.)	90.17 (3.55)
Stroke - mm (in.)	105.92 (4.17)
Compression Ratio	9:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	7
Connecting Rods	Forged
Cylinder Head	Aluminum
Cylinder Liners	No
Ignition	High Energy
Pistons	Aluminum Alloy
Crankshaft	Steel
Lifter Type	Overhead Cam
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Steel Alloy
Hardened Valve Seats	Yes

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-flow spin-on cartridge
Crankcase Capacity - L (qts)	5.7 (6)

Cooling System

Cooling System Type	Pressurized Closed
Water Pump Flow	38 gal/min
Fan Type	Pusher
Fan Speed (rpm)	2300
Fan Diameter mm (in.)	558 (22)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120V

Fuel System

Fuel Type	natural gas, propane
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure	11" - 14" H2O

Engine Electrical System

System Voltage	12VDC
Battery Charging Alternator (Amps)	30
Battery Size	925CCA
Battery Group	31
Battery Voltage	12VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50
Standard Excitation	Brushless
Bearings	Sealed Ball
Coupling	Gear Drive
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes

Voltage Regulator Type	Full Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	+/- 0.25%

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	+/- 0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

NFPA 99	BS5514
NFPA 110	SAE J1349
ISO 8528-5	DIN6271
ISO 1708A.5	IEEE C62.41 TESTING
ISO 3046	NEMA ICS 1

Rating Definitions:
Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)
Prime – Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. (Max. load factor = 80%) A 10% overload capacity is available for 1 out of every 12 hours.

SG130 operating data (60Hz)

POWER RATINGS (kW)

	Natural Gas		Propane Vapor	
Single-Phase 120/240VAC @1.0pf	117	Amps: 488	130	Amps: 542
Three-Phase 120/208VAC @0.8pf	122	Amps: 423	130	Amps: 451
Three-Phase 120/240VAC @0.8pf	122	Amps: 367	130	Amps: 391
Three-Phase 277/480VAC @0.8pf	122	Amps: 183	130	Amps: 195
Three-Phase 346/600VAC @0.8pf	122	Amps: 147	130	Amps: 156

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

		480VAC						208/240VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	130	116	174	232	290	348	406	87	131	174	218	261	305
Upsize 1	150	133	199	265	332	398	464	100	149	199	249	299	348
Upsize 2	200	187	280	373	467	560	653	140	210	280	350	420	490

FUEL

Fuel Consumption Rates*

Natural Gas			Propane Vapor			
Percent Load	ft³/hr	m³/hr	Percent Load	ft³/hr	gal/hr	m³/hr
25%	600	17.0	25%	248	6.8	7.0
50%	1000	28.3	50%	414	11.4	11.7
75%	1325	37.5	75%	548	15.1	15.5
100%	1786	50.6	100%	739	20.4	20.9
* Refer to "Emissions Data Sheet" for maximum fuel flow for EPA and SCAQMD permitting purposes.						

COOLING

		STANDBY
Air Flow (inlet air combustion and radiator)	ft³/min (m³/min)	5979 (169.3)
System Coolant Capacity	Gal (Liters)	6.3 (23.9)
Heat Rejection to Coolant	BTU/hr	500,080
Max. Operating Air Temp on Radiator	°F (°C)	122 (50)
Max. Ambient Temperature	°F (°C)	104 (40)
Maximum Radiator Backpressure	in H_2O	1.50

COMBUSTION AIR REQUIREMENTS

		STANDBY
Flow at Rated Power	cfm	379

ENGINE

		STANDBY
Rated Engine Speed	rpm	3000
Horsepower at Rated kW**	hp	189
Piston Speed	ft/min	2085
BMEP	psi	132

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

EXHAUST

		STANDBY
Exhaust Flow (Rated Output)	cfm (m³/min)	1206 (34.1)
Maximum Recommended Back Pressure	inHg	1.5
Exhaust Temp (Rated Output)	°F (°C)	1250 (676.7)
Exhaust Outlet Size (Open Set)	in	2.5"

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.

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standard features and options

GENERATOR SET

●	Genset Vibration Isolation	Std
○	IBC Seismic Certified/Seismic Rated Vibration Isolators	Opt
○	Extended warranty	Opt
○	Gen-Link Communications Software	Opt
○	Steel Enclosure	Opt
○	Aluminum Enclosure	Opt
○	Enclosure Lighting Kits	Opt

ENGINE SYSTEM

	General	
●	Oil Drain Extension	Std
○	Oil Make-Up System	Opt
○	Oil Heater	Opt
○	Critical Exhaust Silencer (Enclosed Sets)	Opt
●	Stainless steel flexible exhaust connection	Std
●	Air cleaner	Std
●	Fan guard	Std
●	Radiator duct adapter	Std

	Fuel System	
●	Fuel lockoff solenoid	Std
●	Secondary Fuel Regulator	Std
○	Flexible fuel lines	Opt
○	Automatic Gaseous Dual Fuel	Opt

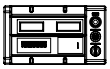
	Cooling System	
○	120VAC Coolant Heater	Opt
○	208VAC Coolant Heater	Opt
○	240VAC Coolant Heater	Opt
○	Other Coolant Heater_____	Opt
●	Closed Coolant Recovery System	Std
●	UV/Ozone resistant hoses	Std
●	Factory-Installed Radiator	Std
●	Radiator Drain Extension	Std

	Engine Electrical System	
●	Battery charging alternator	Std
●	Battery cables	Std
●	Battery tray	Std
○	Battery box	Opt
○	Battery heater	Opt
●	Solenoid activated starter motor	Std
○	2.5A UL battery charger	Opt
○	10A UL float/equalize battery charger	Opt
●	Rubber-booted engine electrical connections	Std

ALTERNATOR SYSTEM

●	UL2200 GENprotect™	Std
○	Main Line Circuit Breaker	Opt
○	2nd Circuit Breaker	Opt
○	3rd Circuit Breaker	-
○	Alternator Upsizing	Opt
○	Anti-Condensation Heater	Opt
○	Tropical coating	Opt
○	Permanent Magnet Generator	Opt

CONTROL SYSTEM

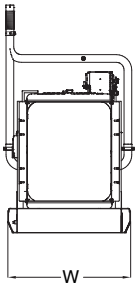


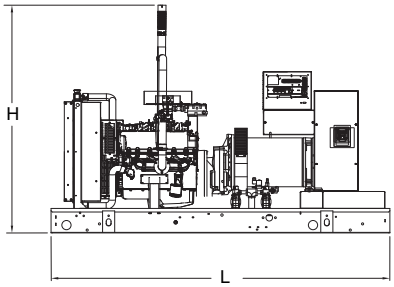
	Control Panel	
●	Digital H Control Panel - Dual 4x20 Display	Std
○	Digital G-100 Control Panel - Touchscreen	-
○	Digital G-200 Paralleling Control Panel - Touchscreen	-
●	Programmable Crank Limiter	Std
●	Programmable Crank Limiter	Std
○	21-Light Remote Annunciator	Opt
○	Remote Relay Panel (8 or 16)	Opt
●	7-Day Programmable Exerciser	Std
●	Special Applications Programmable PLC	Std
●	RS-232	Std
●	RS-485	Std
●	All-Phase Sensing DVR	Std
●	Full System Status	Std
●	Utility Monitoring (Req. H-Transfer Switch)	Std
●	2-Wire Start Compatible	Std
●	Power Output (kW)	Std
●	Power Factor	Std
●	Reactive Power	Std
●	All phase AC Voltage	Std
●	All phase Currents	Std
●	Oil Pressure	Std
●	Coolant Temperature	Std
●	Coolant Level	Std
○	Oil Temperature	Opt
●	Fuel Pressure	Std
●	Engine Speed	Std
●	Battery Voltage	Std
●	Frequency	Std
●	Date/Time Fault History (Event Log)	Std
○	Low-Speed Exercise	-
●	Isochronous Governor Control	Std
●	-40deg C - 70deg C Operation	Std
●	Waterproof Plug-In Connectors	Std
●	Audible Alarms and Shutdowns	Std
●	Not in Auto (Flashing Light)	Std
●	Auto/Off/Manual Switch	Std
●	E-Stop (Red Mushroom-Type)	Std
○	Remote E-Stop (Break Glass-Type, Surface Mount)	Opt
○	Remote E-Stop (Red Mushroom-Type, Surface Mount)	Opt
○	Remote E-Stop (Red Mushroom-Type, Flush Mount)	Opt
●	NFPA 110 Level I and II (Programmable)	Std
●	Remote Communication - RS232	Std
○	Remote Communication - Modem	-
○	Remote Communication - Ethernet	-
○	10A Run Relay	-

	Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)	
○	Low Fuel	
●	Oil Pressure (Pre-programmed Low Pressure Shutdown)	Std
●	Coolant Temperature (Pre-programmed High Temp Shutdown)	Std
●	Coolant Level (Pre-programmed Low Level Shutdown)	Std
○	Oil Temperature	Opt
●	Engine Speed (Pre-programmed Overspeed Shutdown)	Std
●	Voltage (Pre-programmed Overvoltage Shutdown)	Std
●	Battery Voltage	Std

	Other Options
○	_____
○	_____
○	_____

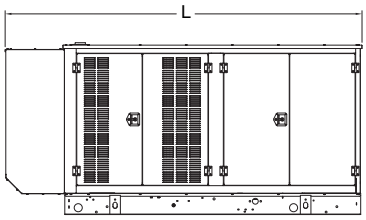
dimensions, weights and sound levels

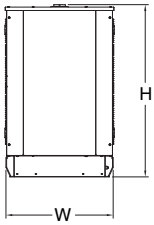




OPEN SET (Includes Exhaust Flex)

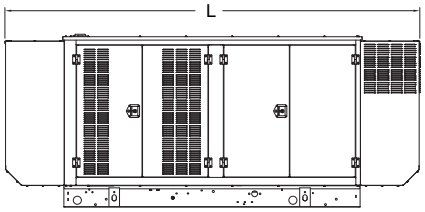
L	W	H	WT	dBA*
110	40	74	2600	86

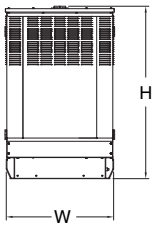




STANDARD ENCLOSURE

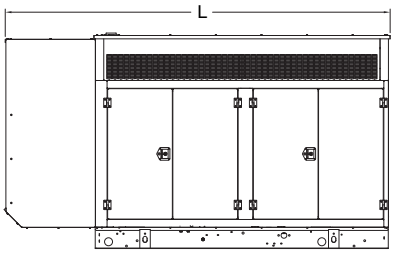
L	W	H	WT	dBA*
133	41	64	3100	83

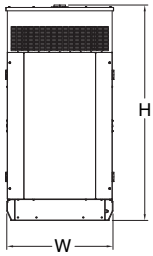




LEVEL 1 ACOUSTIC ENCLOSURE

L	W	H	WT	dBA*
154	41	64	3350	77





LEVEL 2 ACOUSTIC ENCLOSURE

L	W	H	WT	dBA*
145	41	81	3600	74

Note: Units upsized to 150 or 200kW alternators use a larger frame size.

*All measurements are approximate and for estimation purposes only. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

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.

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