

# MGG280 | 14.6 L | 299 kVA

MOBILE GASEOUS GENERATOR

EPA Certified: Mobile and Stationary Non-Emergency

## Prime Power Rating

299 kVA, 237 kW, 60 Hz (NG)  
260 kVA, 208 kW, 50 Hz (NG)

## Continuous Power Rating

224 kVA, 180 kW, 60 Hz (NG)  
195 kVA, 156 kW, 50 Hz (NG)

## Standby Power Rating

335 kVA, 268 kW, 60 Hz (NG)  
287 kVA, 230 kW, 50 Hz (NG)  
203 kVA, 163 kW, 60 Hz (LP)  
190 kVA, 152 kW, 50 Hz (LP)



Picture shown may not reflect actual configuration.

## Codes and Standards

Generac Mobile products are designed to the following standards:



NATM



ISO 8528-5

## Power When and Where You Need It

Generac Mobile generators are designed and engineered to power a variety of projects, in the most extreme environments. Gensets are configured to meet customer needs, including choice of containment, cold weather packages, trailer options, and more.

Generac Mobile generators are manufactured to deliver reliable power, when and where you need it.

**STANDARD FEATURES**

**ENGINE**

- Oil Drain Extension
- Dual Stage Air Cleaner
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Industrial Exhaust Silencer
- Air Filter Restriction Indicator

**FUEL SYSTEM**

- Automatic Changeover NG/LP
- Fuel Shutoff Solenoid
- Fuel Line NPT Connection

**COOLING SYSTEM**

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

**LUBRICATION SYSTEM**

- Full Flow Gear Pump
- Oil Make-Up System with Floating Valve
- Oil Make-Up Tank 60L

**ALTERNATOR SYSTEM**

- Class H Insulation
- 125 Leads
- 2/3 Pitch
- PMG Excitation System
- Full-Load Capacity Alternator

**ELECTRICAL SYSTEM**

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

**ENCLOSURE**

- Skid-Mounted in Heavy Gauge Aluminum Sound Attenuated
- High Performance Sound Absorbing Material
- Gasketed Doors
- Upward Facing Discharge Hood (Exhaust)
- Stainless Steel Hinges

**GENERATOR SET**

- Internal Genset Vibration Isolation
- Wrapped Exhaust Piping
- Bottom (Floor) Power Cable Outlet
- Exhaust Silencer Mounted in Discharge Hood

**TRAILER**

- Three 7,000 lb (3,175 kg) Axles
- Electric Brakes
- 3 in (76.2 mm) Ring Hitch
- Transportation Tie Downs
- Safety Chains with Spring Loaded Safety Hooks
- Tongue Jack with Footplate – 10,000 lb (4,536 kg)
- Tires: 16 in (40.64 cm), 10-Ply, Tubeless
- DOT Approved Tail, Side, Brake, and Directional Lights; Recessed Rear Lights
- Illuminated License Plate Holder

**WARRANTY**

- 1 year or 2,000 Hours

**CONTROL SYSTEM**



**IntelliGen NT™ Display**

**PROGRAM FUNCTIONS**

- Genset START/STOP
- Operation Mode MAN/AUTO/TEST
- Manual Open/Close GCB
- Manual Open/Close MCB
- Horn Deactivation
- Fault Reset
- Menu Navigation
- E-Stop Button

**CONNECTIONS AND COMMUNICATION**

- CAN J1939
- RS485
- Modbus®

**FULL SYSTEM STATUS DISPLAY**

- Power Output (Kw)
- Power Factor Cos
- kWh Total and Last Run
- Active / Reactive / Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Mains Present
- Mains Failure
- Genset Voltage Present
- Genset Failure
- Genset Circuit Breaker ON
- Mains Circuit Breaker ON

**ALARMS AND WARNINGS**

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure
- Engine Over Speed
- Battery Voltage
- Alarms and Warnings Times and Date Stamped
- Snap Shot of Key Operation Parameters During Alarms and Warnings

**RATING DEFINITIONS**

*Prime:* Applies to supplying power to a varying load in lieu of utility for an unlimited amount of running time.

*Continuous:* The maximum power the generator is capable of delivering continuously while supplying a constant electrical load when operated.

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## APPLICATION AND ENGINEERING DATA

### ENGINE SPECIFICATIONS

#### General

Make	PSI
Cylinder #	8
Type	V
Displacement: in <sup>3</sup> (L)	892 (14.6)
Bore: in (mm)	5.04 (128)
Stroke: in (mm)	5.59 (142)
Compression Ratio	10.5:1
Intake Method	Turbocharged / Aftercooled
Connecting Rods	Steel Alloy
Cylinder Heads	Cast Iron OHV
Cylinder Liners	Cast Iron Alloy
Ignition	Electronic
Piston Type	Aluminum Alloy
Crankshaft Type	Forged Steel Alloy
Lifter Type	Solid
Intake Valve Material	High-Temp. Steel Alloy
Exhaust Valve Material	High-Temp. Steel Alloy
Hardened Valve Seats	High-Temp. Steel Alloy

#### Engine Governing

Governor	Electronic
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#### Lubrication System

Oil Pump	Gear
Oil Filter Type	Twin Full Flow
Engine Oil Capacity: qt (L)	32.7 (31)

#### Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Diameter: in (mm)	45 (1,143)

#### Fuel System

Fuel Type	Natural Gas / Wellhead / Liquid Propane
Carburetor	Down Draft
Secondary Fuel Regulator	EPR
Fuel Shutoff Solenoid	Standard (Dual)
Operating Fuel Pressure - in H <sub>2</sub> O (kPa)	7 - 11 (1.7 - 2.7)

#### Engine Electrical System

System Voltage	24V DC
Battery Charger Alternator	Standard
Battery Size	See Battery Index
Battery Voltage	2 X 12 VDC
Ground Polarity	Negative

### ALTERNATOR SPECIFICATIONS

Standard Model	Stamford (UCI274)
Poles	4
Field Type	Revolving
Insulation Class	H
Total Harmonic Distortion (THD)	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	PMG
Bearings	Single
Coupling	Direct via Flexible Disc
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.5%

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## OPERATING DATA

### POWER RATINGS

	Prime NG	Continuous NG	Standby NG	Standby LP
Three-phase, 400/231 VAC @ PF 0.8 50 Hz	260 kVA / 208 kW Amps: 375	195 kVA / 156 kW Amps: 282	287 kVA / 230 kW Amps: 415	190 kVA / 152 kW Amps: 274
Three-phase, 480/277 VAC @ PF 0.8 60 Hz	299 kVA / 237 kW Amps: 355	224 kVA / 180 kW Amps: 270	335 kVA / 268 kW Amps: 403	203 kVA / 163 kW Amps: 245

### FUEL CONSUMPTION RATES

Load	50 Hz			60 Hz				
	Natural Gas: scfh (m <sup>3</sup> /hr)		Propane: scfh (m <sup>3</sup> /hr)	Natural Gas: scfh (m <sup>3</sup> /hr)			Propane: scfh (m <sup>3</sup> /hr)	
	Prime	Continuous		Standby	Prime	Continuous		Standby
100%	2,771 (78)	2,134 (60)	3,041 (86)	860 (24)	3,245 (92)	2,544 (72)	3,582 (101)	952 (27)
75%	2,134 (60)	1,656 (47)	2,336 (66)	664 (19)	2,546 (72)	2,020 (57)	2,799 (79)	754 (21)
50%	1,496 (42)	1,178 (33)	1,631 (46)	468 (13)	1,847 (52)	1,496 (42)	2,015 (57)	556 (16)
25%	859 (24)	700 (20)	926 (26)	271 (8)	1,147 (32)	972 (28)	1,231 (35)	358 (10)

### COOLING

	50 Hz	60 Hz
Cooling Fan Air Flow cfm (m <sup>3</sup> /min)	25,714 (728)	30,000 (849)
Coolant Flow gal/min (L/min)	151 (570)	180 (680)
Coolant System Capacity (L)	28 (127)	28 (127)
Heat Rejection to Coolant BTU/min (kcal/sec)	13,904 (55)	16,189 (68)
Cooling Intake Air Temperature	122 (50)	122 (50)
Maximum Allowable Pressure Cap PSI (bar)	14.7 (1)	14.7 (1)

### COMBUSTION AIR REQUIREMENT

	50 Hz	60 Hz
Flow at Rated Power cfm (m <sup>3</sup> /min)	502 (14)	603 (17)

### ENGINE

	50 Hz	60 Hz
Rated Engine Speed (RPM)	1,500	1,800
Horsepower at Rated RPM (NG PRP) hp (kW)	308 (230)	362 (270)
BMEP (NG PRP) PSI (kPa)	183 (1,262)	179 (1,234)

### EXHAUST

	50 Hz	60 Hz
Exhaust Flow lb/hr (kg/hr)	2,094 (950)	2,782 (1,141)
Max. Allowable Backpressure inHG (kPa)	3 (10.2)	3 (10.2)
Exhaust Temperature (Pre Catalyst) °F (°C)	1,350 (732)	1,350 (732)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

Please consult a Generac Mobile Authorized Service Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, ISO8665, ISO3046, SAE J1228, SAE J1995, and DIN6271 standards.

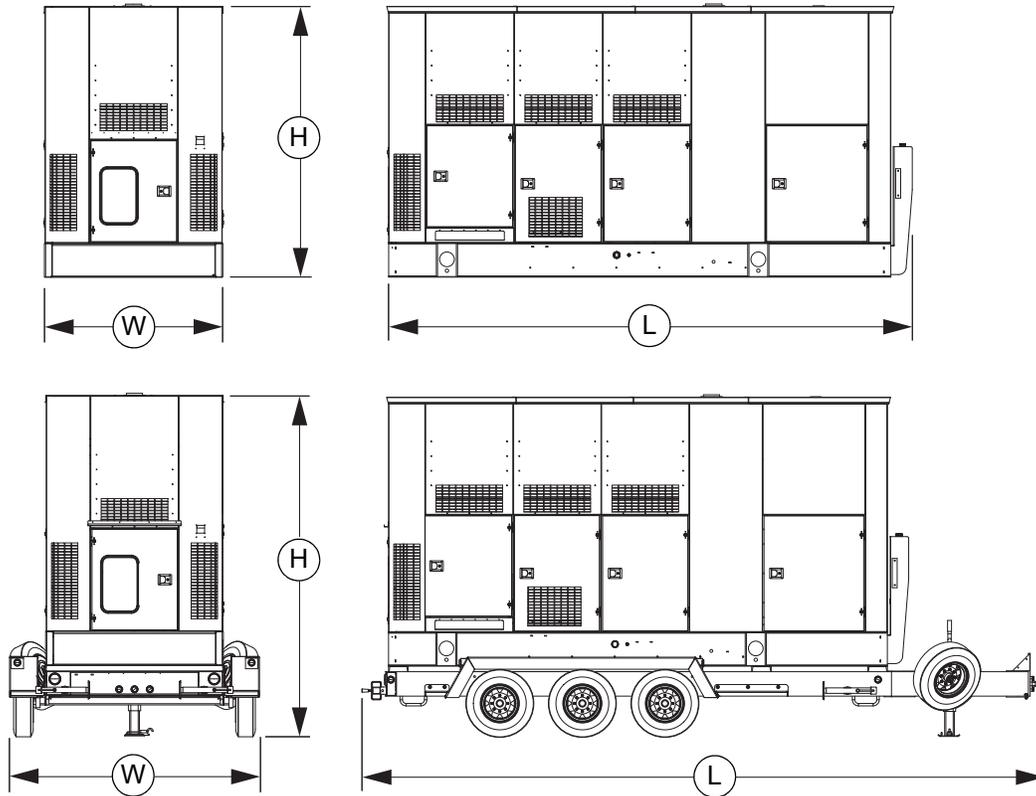
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## DIMENSIONS AND WEIGHTS\*



Skid Mounted	
Operating Weight (Dry / Operating) - lb (kg)	10,914 (4,950) / 11,291 (5,121)
L x W x H - in (m)	192 x 66 x 92 (4.87 x 1.67 x 2.33)
Trailer Mounted	
Operating Weight (Dry / Operating) - lb (kg)	14,085 (6,388) / 14,462 (6,559)
L x W x H - in (m)	285 x 102 x 122 (7.25 x 2.59 x 3.09)
Noise Level	78 dB(A) @ 23 ft (7m)

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

**YOUR FACTORY RECOGNIZED GENERAC MOBILE DEALER**

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Mobile Authorized Service Dealer for detailed installation drawings.