MG150 | 14.2L | 150 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
EPA Certified Stationary Emergency

STANDBY POWER RATING
150 kW, 188 kVA, 60 Hz

PRIME POWER RATING*
135 kW, 169 kVA, 60 Hz

*Built in the USA using domestic and foreign parts
*EPA Certified Prime ratings are not available in the U.S. or its Territories.

CODES AND STANDARDS
Generac products are designed to the following standards:

UL
UL2200, UL508, UL142, UL498

NFPA
NFPA70, 99, 110, 37

NEC
NEC700, 701, 702, 708

ISO
ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA
NEMA ICS10, MG1, 250, ICS6, AB1

ANSI
ANSI C62.41

IBC

POWERING AHEAD
For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac’s gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers’ service support continues after their generator purchase.
ENGINE SYSTEM

General
- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer
- Factory Filled Oil & Coolant
- Radiator Duct Adapter (open set only)

Fuel System
- 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

Engine Electrical System
- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM
- UL2200 GENprotect™
- Class H insulation material
- 2/3 Pitch
- Skewed Stator
- Permanent Magnet Excitation
- Sealed Bearings
- Amortisseur winding
- Full load capacity alternator

GENERATOR SET
- Internal Genset Vibration Isolation
- Separation of circuits—high/low voltage
- Separation of circuits—multiple breakers
- Wrapped Exhaust Piping (enclosed Units only)
- 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
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift on door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

CONTROL SYSTEM

Control Panel
- Digital G-200 Paralleling Control Panel - Touch-Screen
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- kW Hours, Total
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/O Manuel Switch
- E-Stop (Red Mushroom-Type)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms
- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & 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 control (pls)
- Shunt Trip and Auxiliary contact
ENGINE SYSTEM
General
○ Flexible Fuel Line - NPT connection
○ Oil Heater
○ Air Filter Restriction Indicator
○ Stone Guard (Open Set Only)

Fuel 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 Breaker

GENERATOR SET
○ Gen-Link Communications Software (English Only)
○ Extended Factory Testing
○ 8 Position Load Center
○ 2 Year Extended Warranty
○ 5 Year Warranty
○ 5 Year Extended Warranty

ENCLOSURE
○ Standard Enclosure
○ Level 1 Sound Attenuation
○ Level 2 Sound Attenuation
○ Steel Enclosure
○ Aluminum Enclosure
○ 12 VDC Enclosure Lighting Kit
○ 120 VAC Enclosure Lighting Kit
○ AC/DC Enclosure Lighting Kit

CONTROL SYSTEM
○ 21-Light Remote Annunciator
○ Remote Relay Board (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 - Ethernet
○ 10A Run Relay,
○ Ground Fault Indication and Protection
○ Functions

ENGINEERED OPTIONS

ENGINE SYSTEM
○ Fluid containment Pans
○ Coolant heater ball valves

CONTROL SYSTEM
○ Battery Disconnect Switch

ENCLOSURE
○ Motorized Dampers
○ Enclosure Ambient Heaters
○ Door Alarm Switch
○ 150 MPH Wind Kit

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition.
**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 Type**: Cast Iron GT250, OHV
- **Cylinder Head**: Ductile Iron
- **Cylinder Liners**: Altronic CD1
- **Piston Type**: Aluminum
- **Crankshaft Type**: Ductile Iron
- **Lifter Type**: Solid
- **Intake Valve Material**: Special Heat-Resistant Steel
- **Exhaust Valve Material**: Alloy Steel, High Temp
- **Hardened Valve Seats**: Alloy Steel, High Temp
- **Governor**: Electronic
- **Frequency Regulation (Steady State)**: +/- 0.25%

**Engine Governing**
- **Governor**: Electronic

**Lubrication System**
- **Oil Pump Type**: Gear
- **Oil Filter Type**: Full-Flow Cartridge
- **Crankcase Capacity - L (qts)**: 34.3 (36.2)

**Cooling System**
- **Water Pump Flow -gpm (lpm)**: 110 (416)
- **Fan Type**: Pusher
- **Fan Speed (rpm)**: 1894
- **Fan Diameter mm (in)**: 762 (30)
- **Coolant Heater Wattage**: 2000
- **Coolant Heater Standard Voltage**: 240 V

**Fuel System**
- **Fuel Type**: Natural Gas
- **Carburetor**: Down Draft
- **Secondary Fuel Regulator**: Standard
- **Fuel Shut Off Solenoid**: Standard
- **Operating Fuel Pressure (Standard)**: 7” - 11” H2O

**Engine Electrical System**
- **System Voltage**: 24 VDC
- **Battery Charging Alternator**: Standard
- **Battery Size**: See Battery Index 0161970SBY
- **Battery Voltage**: (2) 12 VDC
- **Ground Polarity**: Negative

**ALTERNATOR SPECIFICATIONS**

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

<table>
<thead>
<tr>
<th>Standard Excitation</th>
<th>Permanent Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearings</td>
<td>Sealed Ball</td>
</tr>
<tr>
<td>Coupling</td>
<td>Direct, Flexible Disc</td>
</tr>
<tr>
<td>Prototype Short Circuit Test</td>
<td>Yes</td>
</tr>
<tr>
<td>Voltage Regulator Type</td>
<td>Full Digital</td>
</tr>
<tr>
<td>Number of Sensed Phases</td>
<td>3</td>
</tr>
<tr>
<td>Regulation Accuracy (Steady State)</td>
<td>±0.25%</td>
</tr>
</tbody>
</table>
## OPERATING DATA

### POWER RATINGS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-Phase 120/208 VAC @0.8pf</td>
<td>150 kW</td>
</tr>
<tr>
<td>Three-Phase 120/240 VAC @0.8pf</td>
<td>150 kW</td>
</tr>
<tr>
<td>Three-Phase 277/480 VAC @0.8pf</td>
<td>150 kW</td>
</tr>
<tr>
<td>Three-Phase 347/600 VAC @0.8pf</td>
<td>150 kW</td>
</tr>
<tr>
<td></td>
<td><strong>Amps:</strong></td>
</tr>
<tr>
<td></td>
<td>521</td>
</tr>
<tr>
<td></td>
<td>452</td>
</tr>
<tr>
<td></td>
<td>226</td>
</tr>
<tr>
<td></td>
<td>181</td>
</tr>
</tbody>
</table>

### STARTING CAPABILITIES (sKVA)

<table>
<thead>
<tr>
<th>Alternator</th>
<th>480 VAC</th>
<th>208/240 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>sKVA vs. Voltage Dip</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Standard</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Upsize</td>
<td>10%</td>
<td>15%</td>
</tr>
</tbody>
</table>

### FUEL CONSUMPTION RATES*

<table>
<thead>
<tr>
<th>Percent Load</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>745 (21.1)</td>
</tr>
<tr>
<td>50%</td>
<td>1278 (36.2)</td>
</tr>
<tr>
<td>75%</td>
<td>1725 (48.8)</td>
</tr>
<tr>
<td>100%</td>
<td>2129 (60.3)</td>
</tr>
</tbody>
</table>

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

### COOLING

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (ft³/hr (m³/hr))</th>
<th>Standby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Flow (inlet air combustion and radiator)</td>
<td></td>
<td>9349 (264.7)</td>
</tr>
<tr>
<td>Coolant Flow per Minute</td>
<td></td>
<td>110 (416)</td>
</tr>
<tr>
<td>Heat Rejection to Coolant</td>
<td></td>
<td>526,760</td>
</tr>
<tr>
<td>Max. Operating Air Temp on Radiator</td>
<td>°F (°C)</td>
<td>122 (50)</td>
</tr>
<tr>
<td>Max. Operating Ambient Temperature (before derate)</td>
<td>°F (°C)</td>
<td>110 (43.3)</td>
</tr>
<tr>
<td>Maximum Radiator Backpressure</td>
<td>in H₂O</td>
<td>0.5</td>
</tr>
</tbody>
</table>

### COMBUSTION AIR REQUIREMENT

<table>
<thead>
<tr>
<th>Standby</th>
<th>Flow at Rated Power cfm (m³/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>349 (9.9)</td>
</tr>
</tbody>
</table>

### ENGINE

<table>
<thead>
<tr>
<th>Standby</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rated Engine Speed rpm</td>
</tr>
<tr>
<td></td>
<td>Horsepower at Rated kW** hp</td>
</tr>
<tr>
<td></td>
<td>Piston Speed ft/min</td>
</tr>
<tr>
<td></td>
<td>Piston Speed psi</td>
</tr>
</tbody>
</table>

** 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.
DIMENSIONS AND WEIGHTS*

OPEN SET (Includes Exhaust Flex)

<table>
<thead>
<tr>
<th>L x W x H (in)</th>
<th>127.95 (3250) x 52.93 (1344.5) x 67.37 (1711.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight lbs (kg)</td>
<td>5756 (2610.9)</td>
</tr>
</tbody>
</table>

STANDARD ENCLOSURE

<table>
<thead>
<tr>
<th>L x W x H (in)</th>
<th>153.89 (3909) x 52.73 (1339.3) x 69.67 (1769.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight lbs (kg)</td>
<td>Steel: 6577 (2983)</td>
</tr>
<tr>
<td></td>
<td>Aluminum: 6035 (2738)</td>
</tr>
</tbody>
</table>

LEVEL 1 ACOUSTIC ENCLOSURE

<table>
<thead>
<tr>
<th>L x W x H (in)</th>
<th>180.11 (4574.7) x 52.73 (1339.3) x 69.67 (1769.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight lbs (kg)</td>
<td>Steel: 6990 (3171)</td>
</tr>
<tr>
<td></td>
<td>Aluminum: 6176 (2801)</td>
</tr>
</tbody>
</table>

LEVEL 2 ACOUSTIC ENCLOSURE

<table>
<thead>
<tr>
<th>L x W x H (in)</th>
<th>154.45 (3922.9) x 53.96 (1370.6) x 93.40 (2372.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight lbs (kg)</td>
<td>Steel: 7236 (3282)</td>
</tr>
<tr>
<td></td>
<td>Aluminum: 6259 (2839)</td>
</tr>
</tbody>
</table>

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.