Olympian Natural gas or Propane fuel generator sets deliver dependable, clean, economical power — even in the most demanding conditions — and Olympian gensets are available in a wide range of configurations with optional equipment.

Olympian generator sets are designed, engineered and manufactured for optimal performance. All major components are tested individually; once assembled, the entire unit is tested at and above 100% of rated load for safety and operation.

These complete, ready-to-run packages have another distinct advantage. They all come with the comprehensive service and support of Cat® dealers — beginning with prompt delivery and ongoing support throughout the life of the generator set.
LG Series

Standard Features

**ENGINE SYSTEM**
- **General**
  - Oil Drain Extension
  - Air Cleaner
  - Fan Guard
  - Stainless Steel flexible exhaust connection
  - Critical Exhaust Silencer
  - Factory Filled Oil
  - Radiator duct adapter (open set only)
- **Fuel System**
  - Primary and Secondary Fuel Shutoff
  - Flexible Fuel Line - NPT Connection
- **Cooling System**
  - Closed Coolant Recovery System
  - UV/Ozone resistant hoses
  - Factory-installed Radiator
  - Radiator drain extension
  - 50/50 Ethylene glycol antifreeze
- **Engine Electrical System**
  - Battery charging alternator
  - Battery Cables
  - Battery Tray
  - Solenoid activated starter motor
  - Rubber-booted engine electrical connections

**ALTERNATOR SYSTEM**
- **Class H insulation material**
- **2/3 Pitch**
- **Skewed Stator**
- **Brushless 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**
- **Standard Factory Testing**
- **2 Year Limited Warranty (Standby rated Units)**
- **1 Year 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 off door hinges
- Stainless steel lockable handles

**CONTROL SYSTEM**
- **Control Panel**
  - Digital H Control Panel - Dual 4x20 Display
  - Programmable Crank Limiter
  - 7-Day Programmable Exerciser
  - Special Applications Programmable PLC
  - RS-232/485
  - All-Phase Sensing DVR
  - Full System Status
  - Utility Monitoring
  - Low Fuel Pressure Indication
  - 2-Wire Start Compatible
  - Power Output (kW)
  - Power Factor
  - kW Hours, Total & Last Run
- **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/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**
- **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)
# Configurable Options

## ENGINE SYSTEM
- General
  - Engine Block Heater
  - Oil Heater
  - Air Filter Restriction Indicator
  - Stone Guard (Open Set Only)
- Engine Electrical System
  - 10A UL battery charger
  - 2.5A UL battery charger
  - Battery Warmer

## ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

## GENERATOR SET
- Extended Factory Testing (3 Phase Only)
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

## CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

## 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 - Modern
- Remote Communication - Ethernet
- 10A Run Relay
- Ground fault indication and protection functions

## Engineered Options

## ENGINE SYSTEM
- Coolant heater ball valves
- Fluid containment pans

## ALTERNATOR SYSTEM
- 3rd Breaker Systems

## GENERATOR SET
- Special Testing
- Battery Box

## ENCLOSURE
- Motorized Dampers
- Enclosure Ambient Heaters

## CONTROL SYSTEM
- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

# 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.

### ENGINE SPECIFICATIONS

#### General

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder #</td>
<td>8</td>
</tr>
<tr>
<td>Type</td>
<td>V</td>
</tr>
<tr>
<td>Displacement - L (Cu In)</td>
<td>8.9L (540)</td>
</tr>
<tr>
<td>Bore - mm (in)</td>
<td>114.31 (4.5)</td>
</tr>
<tr>
<td>Stroke - mm (in)</td>
<td>107.15 (4.25)</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>10.5:1</td>
</tr>
<tr>
<td>Intake Air Method</td>
<td>Naturally Aspirated</td>
</tr>
<tr>
<td>Number of Main Bearings</td>
<td>5</td>
</tr>
<tr>
<td>Connecting Rods</td>
<td>Forged</td>
</tr>
<tr>
<td>Cylinder Head</td>
<td>Cast Iron</td>
</tr>
<tr>
<td>Cylinder Liners</td>
<td>No</td>
</tr>
<tr>
<td>Ignition</td>
<td>High Energy</td>
</tr>
<tr>
<td>Pistons</td>
<td>Aluminum Alloy</td>
</tr>
<tr>
<td>Crankshaft</td>
<td>Steel</td>
</tr>
<tr>
<td>Lifter Type</td>
<td>Hydraulic Roller</td>
</tr>
<tr>
<td>Intake Valve Material</td>
<td>Steel Alloy</td>
</tr>
<tr>
<td>Exhaust Valve Material</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Hardened Valve Seats</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Engine Governing

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor</td>
<td>Electronic</td>
</tr>
<tr>
<td>Frequency Regulation (Steady State)</td>
<td>+/- 0.25%</td>
</tr>
</tbody>
</table>

#### Lubrication System

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Pump Type</td>
<td>Gear</td>
</tr>
<tr>
<td>Oil Filter Type</td>
<td>Full-flow spin-on cartridge</td>
</tr>
<tr>
<td>Crankcase Capacity - L (qts)</td>
<td>8.5 (8.0)</td>
</tr>
</tbody>
</table>

#### Cooling System

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling System Type</td>
<td>Pressurized Closed</td>
</tr>
<tr>
<td>Water Pump Flow - gpm (lpm)</td>
<td>26 (98)</td>
</tr>
<tr>
<td>Fan Type</td>
<td>Pusher</td>
</tr>
<tr>
<td>Fan Speed (rpm)</td>
<td>2330</td>
</tr>
<tr>
<td>Fan Diameter mm (in)</td>
<td>558 (22)</td>
</tr>
<tr>
<td>Coolant Heater Wattage</td>
<td>1500</td>
</tr>
<tr>
<td>Coolant Heater Standard Voltage</td>
<td>120 V</td>
</tr>
</tbody>
</table>

#### Fuel System

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Type</td>
<td>Natural Gas, Propane Vapor</td>
</tr>
<tr>
<td>Carburetor</td>
<td>Down Draft</td>
</tr>
<tr>
<td>Secondary Fuel Regulator</td>
<td>Standard</td>
</tr>
<tr>
<td>Fuel Shut Off Solenoid</td>
<td>Standard</td>
</tr>
<tr>
<td>Operating Fuel Pressure (Standard)</td>
<td>11” - 14” H₂O</td>
</tr>
<tr>
<td>Operating Fuel Pressure (Optional)</td>
<td>7” - 14” H₂O</td>
</tr>
</tbody>
</table>

#### Engine Electrical System

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Voltage</td>
<td>12 VDC</td>
</tr>
<tr>
<td>Battery Charging Alternator</td>
<td>Standard</td>
</tr>
<tr>
<td>Battery Size</td>
<td>See Battery Index 0161970SBY</td>
</tr>
<tr>
<td>Battery Voltage</td>
<td>12 VDC</td>
</tr>
<tr>
<td>Ground Polarity</td>
<td>Negative</td>
</tr>
</tbody>
</table>

### ALTERNATOR SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Model</td>
<td>390 mm</td>
</tr>
<tr>
<td>Poles</td>
<td>4</td>
</tr>
<tr>
<td>Field Type</td>
<td>Revolving</td>
</tr>
<tr>
<td>Insulation Class - Rotor</td>
<td>H</td>
</tr>
<tr>
<td>Insulation Class - Stator</td>
<td>H</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Telephone Interference Factor (TIF)</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>Standard Excitation</td>
<td>Brushless</td>
</tr>
<tr>
<td>Bearings</td>
<td>Sealed Ball</td>
</tr>
<tr>
<td>Coupling</td>
<td>Direct Drive</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>All</td>
</tr>
<tr>
<td>Regulation Accuracy (Steady State)</td>
<td>+/- 0.25%</td>
</tr>
</tbody>
</table>
POWER RATINGS

FUEL CONSUMPTION RATES*

STARTING CAPABILITIES (sKVA)

COOLING

COMBUSTION AIR REQUIREMENTS

ENGINE

EXHAUST

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

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

Derating – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a CAT® Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.
<table>
<thead>
<tr>
<th>Enclosure Type</th>
<th>Dimensions (L x W x H in (mm))</th>
<th>Weight (lbs (kg))</th>
<th>Sound Level (dBA*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN SET (Includes Exhaust Flex)</td>
<td>94.2 (2394) x 40 (1016) x 47.5 (1206)</td>
<td>2064 (936.2)</td>
<td>83.8</td>
</tr>
<tr>
<td>STANDARD ENCLOSURE</td>
<td>111.79 (2839.5) x 40.46 (1027.8) x 56.18 (1427)</td>
<td>Steel: 2708 (1228) Aluminum: 2413 (1094)</td>
<td>79.7</td>
</tr>
<tr>
<td>LEVEL 1 ACOUSTIC ENCLOSURE</td>
<td>129.42 (3287.2) x 40.46 (1027.8) x 56.18 (1427)</td>
<td>Steel: 2798 (1269.2) Aluminum: 2355 (1068)</td>
<td>75.3</td>
</tr>
<tr>
<td>LEVEL 2 ACOUSTIC ENCLOSURE</td>
<td>111.81 (2840) x 40.46 (1027.8) x 68.61 (1742.8)</td>
<td>Steel: 3022 (1370.8) Aluminum: 2431 (1103)</td>
<td>70.8</td>
</tr>
</tbody>
</table>

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