

# Cat® G3520H

## Gas Generator Sets

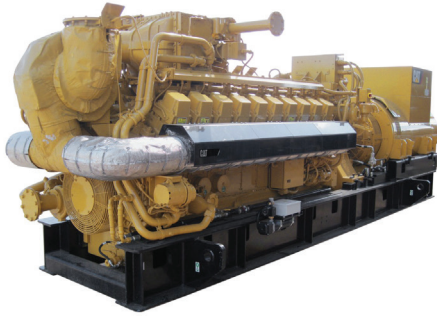


Image shown may not reflect actual configuration

Bore – mm (in)	170 (6.7)
Stroke – mm (in)	215 (8.5)
Displacement – L (in <sup>3</sup> )	97.5 (5956)
Compression Ratio	12.1
Aspiration	Turbocharged
Fuel System	Electronic Fuel Control Valve
Governor Type	ADEM™ A4

<b>Continuous (@ 1.0 pf)</b> 50 Hz ekW
2519

### Standard Features

#### Cat® Engine

- Robust high speed block design provides prolonged life and lower owning and operating costs
- High power density and efficiency

#### Generator Set Package

- Top tier electrical efficiency
- Lowest maintenance and overhaul costs driven by low oil consumption, extended service intervals, and reduced downtime
- Capable of ISO 8528-5 Class G1 transient performance with specified load steps
- Complete genset reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

#### Generators

- High-efficiency design
- Designed to match performance and output characteristics of Cat engines

#### EMCP 4 Control Panels

- User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements

#### Warranty

- 12 months/unlimited hour warranty for continuous ratings
- Extended service protection is available to provide extended coverage options

#### Worldwide Product Support

- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

#### Financing

- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

## Optional Equipment

### Engine

#### **Air Cleaner (Single Element)**

- Installed
- Supplied loose

#### **Muffler**

- Industrial grade (15 dB)
- Residential grade (18 dB)
- Critical grade (25 dB)
- Spark arresting

#### **Starting**

- Standard batteries
- Standard electric starter(s)
- Air starter(s)
- Jacket water heater
- Oil prelube pump
- Oil level regulator

### Generators

#### **Output voltage**

- 6600V  6900V
- 10500V  11000V

#### **Excitation**

- Permanent magnet (PM)

#### **Attachments**

- Anti-condensation heater
- Stator and bearing temperature monitoring and protection

### Power Termination

#### **Type**

- Bus bar
- LSI  LSI-G
- LSI-G-P

### Enclosure

- Weather protective
- Sound attenuated

#### **Attachments**

- Cold weather bundle
- DC lighting package
- AC lighting package
- Motorized louvers

### Fuel System Pressure

- Standard

### Control System

#### **Controller**

- EMCP 4.3

#### **Attachments**

- Local annunciator module
- Remote annunciator module
- Load share module
- Remote monitoring software

### Charging

- Battery charger – 20A
- Engine driven charging alternator

### Vibration Isolators

- Spring
- Seismic rated

### Cat Connect

#### **Connectivity**

- Ethernet

### Extended Service Options

#### **Terms**

- 2 year
- 3 year
- 5 year
- 10 year

#### **Coverage**

- Silver
- Gold
- Platinum
- Platinum Plus

### Ancillary Equipment

- Automatic transfer switch (ATS)
- Uninterruptible power supply (UPS)
- Paralleling switchgear
- Paralleling controls

### Certifications

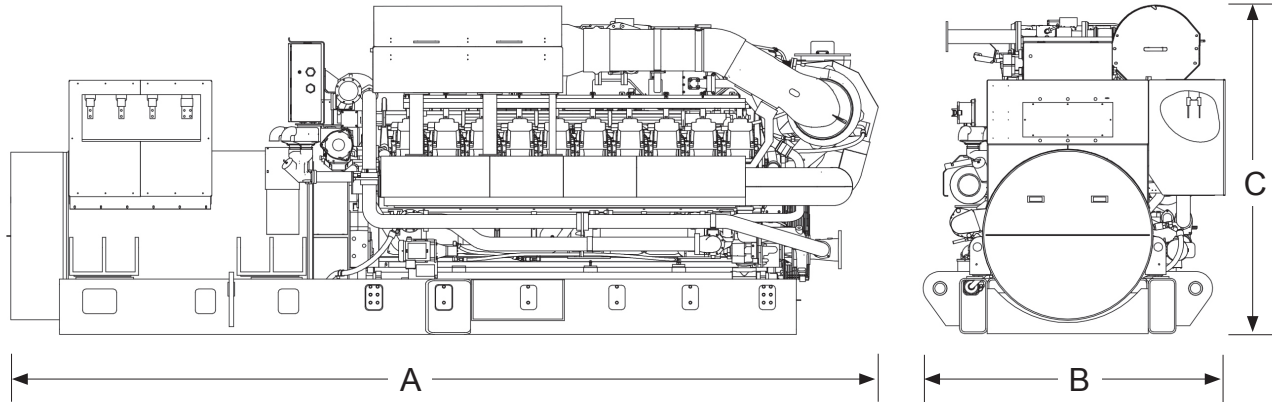
- UL 2200 Listed
- CSA Certified
- EU Declaration of Conformity
- EEC Declaration of Conformity

**Note:** Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.

## Package Performance

<b>Performance</b>		Continuous	
Frequency		50 Hz	
Genset power rating at 1.0 pf – ekW		2519	
NOx Emission Level (mg/Nm <sup>3</sup> NOx)		500	
Performance number		EM0900-03	
Genset efficiency		45.3	
Thermal efficiency		41	
Total efficiency		86.3	
<b>Fuel Consumption</b>			
100% load with fan – MJ/ekW-hr (Btu/ekW-hr)	7.94	(7526.0)	
75% load with fan – MJ/ekW-hr (Btu/ekW-hr)	8.09	(7675.0)	
50% load with fan – MJ/ekW-hr (Btu/ekW-hr)	8.45	(8010.0)	
<b>Cooling System</b>			
Total jacket water circuit (JW+OC+1AC) – kW (Btu/min)	1390	(79073)	
Total aftercooler circuit (2AC) – kW (Btu/min)	298	(16928)	
<b>Altitude Capability</b>			
At 25°C (77°F) ambient, above sea level – m (ft)	152	(500)	
<b>Exhaust System</b>			
Exhaust temperature – engine outlet – °C (°F)	394	(742)	
Air flow (0°C, 101.3 kPa)/(77°F, 14.7 psia) – Nm <sup>3</sup> /bkW-hr (ft <sup>3</sup> /min)	4	(6295)	
Exhaust gas mass flow – kg/bkW-hr (lb/hr)	5	(28899)	
<b>Heat Rejection</b>			
Heat rejection to jacket water – kW (Btu/min)	593	(33734)	
Heat rejection to exhaust (LHV to 120°C/248°F) – kW (Btu/min)	1092	(62123)	
Heat rejection to auxiliary circuit – kW (Btu/min)	439	(24951)	
Heat rejection to atmosphere from engine and generator – kW (Btu/min)	157	(8562)	
<b>Engine Speed</b>			
rpm		1500	

## Weights and Dimensions



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
7668 (302)	2173 (86)	2473 (97)	24 800 (54,675)

**Note:** For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.

## Ratings Definitions

### Continuous Power Rating

Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of operating hours.

### Applicable Codes and Standards

AS 1359, CSA C22.2 No. 100-04, UL 142, UL 489, UL 869, UL 2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC 60034-1, ISO 3046, ISO 8528, NEMA MG1-22, NEMA MG1-33, 2014/35/EU, 2006/42/EC, 2014/30/EU.

**Note:** Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

### Fuel Rates

1. For transient response, ambient, and altitude capabilities consult your local Cat dealer.
2. Fuel pressure range specified is to the engine fuel control valve. Additional fuel train components may be required and should be considered in pressure and flow calculations.
3. For a complete reference of definitions and conditions see datasheet EM0900-03.

<http://www.cat.com/powergeneration>

©2017 Caterpillar  
 All rights reserved.

Materials and specifications are subject to change without notice.  
 The International System of Units (SI) is used in this publication.

CAT, CATERPILLAR, their respective logos, ADEM, "Caterpillar Yellow", the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.