# Cat® G3520H

# **Gas Generator Sets**





Bore – mm (in)	170 (6.7)	
Stroke – mm (in)	215 (8.5)	
Displacement – L (in³)	97.5 (5956)	
Compression Ratio	12.1	
Aspiration	Turbocharged	
Fuel System	Electronic Fuel Control Valve	
Governor Type	ADEM™ A4	

Continuous (@ 1.0 pf) 60 Hz ekW	
2500	

#### **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.

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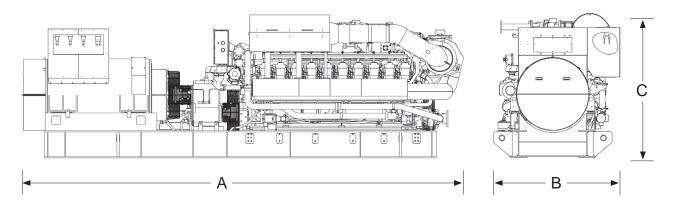
# Package Performance

Performance Continuous		nuous	
equency 60 Hz		Hz	
Genset power rating at 1.0 pf – ekW	set power rating at 1.0 pf – ekW 2500		
NOx Emission Level @ 1 g/bhp-hr	ion Level @ 1 g/bhp-hr 500		
Performance number	EM09	912-04	
Genset efficiency	4	15	
Thermal efficiency	4	l1	
Total efficiency	3	36	
Fuel Consumption			
100% load with fan - MJ/ekW-hr (Btu/ekW-hr)	8	(7583.0)	
75% load with fan - MJ/ekW-hr (Btu/ekW-hr)	8.15	(7728.0)	
50% load with fan - MJ/ekW-hr (Btu/ekW-hr)	8.51	(8073.0)	
Cooling System			
Total jacket water circuit (JW+OC+1AC) – kW (Btu/min)	1390	(79069)	
Total aftercooler circuit (2AC) – kW (Btu/min)	319	(18149)	
Altitude Capability			
At 25°C (77°F) ambient, above sea level – m (ft)	152	(500)	
Exhaust System			
Exhaust temperature – engine outlet – °C (°F)	394	(742)	
Air flow (0°C, 101.3 kPa)/(77°F, 14.7 psia) – Nm³/bkW-hr (ft³/min)	4.14	(6294)	
Exhaust gas mass flow – kg/bkW-hr (lb/hr)	5.07	(28896)	
Heat Rejection			
Heat rejection to jacket water – kW (Btu/min)	593	(33728)	
Heat rejection to exhaust (LHV to 120°C/248°F) – kW (Btu/min)	1092	(62126)	
Heat rejection to auxiliary circuit – kW (Btu/min)	303	(17280)	
Heat rejection to atmosphere from engine and generator – kW (Btu/min)	141	(7644)	
Engine Speed			
rpm – uses a speed increasing gearbox for 60 Hz	15	1500	

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## **Weights and Dimensions**



Dim "A"	Dim "B"	Dim "C"	Dry Weight
mm (in)	mm (in)	mm (in)	kg (lb)
7668.3 (301.90)	2173.3 (85.56)	2407.5 (94.78)	

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 ekW 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

- For transient response, ambient, and altitude capabilities consult your local Cat dealer.
- 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 EM0912-04.