# **Product Specifications For G3520C**



# **Generator Set Specifications**

Continuous Rating	2050 ekW
Fuel Type	Natural Gas, Biogas, Coal Gas
Maximum Electrical Efficiency	40.10%
Maximum Standby Rating	2050
Frequency	50 / 60 Hz
RPM	1200 / 1500 / 1800 rpm

# **Engine Specifications**

Engine Model	G3520C
Displacement	5270 in³
Aspiration	ТА
Bore	6.7 in
Stroke	7.5 in
Fuel System	Natural Gas, Biogas, Coal Gas
Compression Ratio	11.3
Compressor Cot Dimensions	

### **Generator Set Dimensions**

**Dry Weight - Genset** 

Length	249 in
Width	79 in
Height	92 in

37959 lb

Weight 37953 lb

## **G3520C Standard Equipment**

#### Air Inlet

Two-element single-stage air cleaner with enclosure and service indicator

#### **Control Panels**

**EMCP 4.3** 

#### Cooling

ANSI Class 6 in/DN customer flange connections for JW inlet and outlet Engine driven water pumps for jacket water and aftercooler 2nd Stage SCAC-Cat Flange Jacket water and SCAC driven pumps Jacket water and SCAC thermostat and outlet--ANSI 6 in/DN150

#### **Exhaust**

Dry exhaust manifolds, insulated and shielded
Cat-flanged face outlet on turbocharger
Individual exhaust port and turbocharger outlet wired to Integrated Tmeperature Sensing Module (ITSM) with GECM providing alarms and shutdowns

#### **Fuel System**

Fuel system is sized for 31.5 to 47.2 MJ/NM3 dry pipeline natural gas with pressure of 10.2 to 34.5KPa to the engine fuel control valve
Electronic fuel metering valve, ANSI flange
Throttle plate, 24V DC actuator, controlled by GECM
24V ETR Gas Shutoff Valve

#### **Ignition System**

Electronic Ignition System (controlled by GECM)
Individual Cylinder Detonation Sensitive Timing (DST)

#### **Generator**

3-phase brushless, salient pole
Class F Insulation & temperature rise
Reactive droop
Permanent Magnet Excitiation
Winding temperature detectors
Anti-condensation space heater
SR4B or SR5
Busbar connections

Caterpillar's Digital Voltage Regulator (CDVR) with 3-phase sensing and KVAR/PF control SR4B

#### General

Crankshaft Vibration Damper and Guard

**RH Service** 

Parts Book

Operation and maintenance manuals

Paint - Caterpillar Yellow except rails and radiators gloss black

### **G3520C Optional Equipment**

#### **Air Inlet**

Enclosure Mounting Brackets and Piping Mounting stand Air cleaner with precleaner

#### **Contol Panel**

Custom 8-Light Alarm Module
Local NFPA99-110 Alarm Module w/LEDs
Remote 24-32V 8/16 Annunciator
Synchronizing Module
PL1000E/PL1000T Communications Module
Engine Failure Relay

#### **Control Panels**

Local alarm module

### **Cooling**

Inlet/Outlet connections
Engine pumps
Aftercooler air lines, aftercooler core replacement
Jacket water coolant heater

#### **Exhaust**

Mufflers (15/18/25 dBA Attenuation) and spark-arresting muffler with ANSI companion flanges Exhaust expanders
Flexible fittings
305/360/406 mm Elbow Kits

#### **Fuel System**

14-69 kPa (2-10 psi) gas pressure regulator Fuel filter 24V DC Gas shutoff valve 207-276kPa, 30-40 psi gas knockdown regulator

#### Generator

Generator Removal
Annunciator Modules
Medium and high voltage generators and attachment
60 Hz--480/4160 Volt Generator Options
Cable access box

Generator air filter
European Bus Bars
Low voltage extension box
Bearing temperature detectors
8.7/15 kV Class Current Transformers (CCCT, DCT, CT)
50 Hz--3300/6600 Volt Generator Options

## **Governing System**

Load share module

## Starting/Charging

Jacket water heater
Battery diconnect switch
24V starting motors
Battery with cables and rack (shipped loose)
60A, 24V charging alternator (requires engine driven pumps)