# PRODUCT SPECIFICATIONS FOR G3520C

GENERATOR SET SPECIFICATIONS	
Maximum Continuous Poting	2050 ekW
Maximum Continuous Rating	2030 ekvv
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	TA
Bore	6.7 in
Stroke	7.5 in
Fuel System	Natural Gas, Biogas, Coal Gas
Compression Ratio	11.3
GENERATOR SET DIMENSIONS	
Length	249 in
Width	79 in
Height	92 in
Dry Weight - Genset	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)