

# PRODUCT SPECIFICATIONS FOR G3512 WITH FAST RESPONSE

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## GENERATOR SET SPECIFICATIONS

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Gas Standby Rating	1000 ekW @ 0.8pf
Fuel Type	Natural Gas
Emissions/Fuel Strategy	U.S. EPA Certified for Non-Emergency Stationary Genset
RPM	1800 rpm
Frequency	60 Hz
Compression Ratio	9.7
Displacement	3173 in <sup>3</sup>

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## ENGINE SPECIFICATIONS

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Engine Model	G3512
Displacement	3173 in <sup>3</sup>
Aspiration	TA
Bore	6.7 in
Stroke	7.5 in

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## GENERATOR SET DIMENSIONS

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Length	205.7 in
Width	90 in
Height	99.4 in
Weight	27500 lb

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# G3512 WITH FAST RESPONSE STANDARD EQUIPMENT

## AIR INLET

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

Dual air cleaners, 1 per side, with service indicator

## CONTROL PANEL

EMCP 4.3

## COOLING SYSTEM

Engine driven pumps for jacket water and separate circuit aftercooler

## COOLING

Package mounted radiator

Jacket water and SCAC engine-driven pumps

Jacket water and SCAC thermostats

LH or RG connections when radiator is not selected

## EXHAUST

Dry exhaust manifolds, insulated and shielded

Individual exhaust port and turbocharger outlet wired to integrated temperature sensing module (ITSM) with GCEM providing alarms and shutdowns

Cat-flanged face outlet on turbocharger

## FUEL

NOx sensor based air-fuel-ratio control

Pipeline Natural Gas: 800-1000 BTU/scf and 70-100 Methane Number

Gas Train: NFPA37 and CSA B149.3

0.5 to 5 psi engine fuel inlet pressure

## FUEL SYSTEM

Fuel system is sized for 31.5 to 47.2 MJ/NM<sup>3</sup> dry pipeline natural gas with pressure of 10.2 to 34.5KPa to the engine fuel control valve

Engine-installed electronic control valve

Throttle plate, 24V DC actuator, controlled by GECEM

24V DC energized-to-run (ETR) gas shutoff valve

Gas pressure regulator

## GENERAL

Operation and maintenance manuals

Paint- Caterpillar Yellow except rails and radiators gloss black

Parts book

“Stationary Use Only” Label in Correspondence with EPA Nonroad Mobile SI rule

RH Service

Crankshaft vibration damper and guard

## LUBRICATION

Cartridge style oil filter

Gear type lube oil pump

## STARTING/CHARGING

Jacket water heater

Battery with cables and rack (shipped loose)

Electric Starter

Batteries with rack and cables

24V DC starting motors

## GENERATOR

NEMA Class H insulation

Permanent Magnet Excitation

SR5

Anti-condensation space heater

Caterpillar's Digital Voltage Regulator (CDVR) including reactive droop capability, 3-phase voltage sensing, KVAR/PF modes, RFI suppression, and a min/max exciter

Winding temperature detectors

## IGNITION SYSTEM

Electronic Ignition System (controlled by ADEM A4)

Individual Cylinder Detonation Sensitive Timing (DST)

## GOVERNING

ADEM A4 speed governor with 4 to 20ma (0V to 5V) speed input

# G3512 WITH FAST RESPONSE OPTIONAL EQUIPMENT

## AIR INLET

Mounting brackets and piping

Air cleaner with precleaner

## CONTROL PANEL

Local PC monitoring

Engine failure relay

Remote PC monitoring

Local alarm module

Remote annunciator

## COOLING

Remote radiator for JW and SCAC circuits, level switch included but not wired

Inlet/Outlet connections

Coolant level drain line with valves, fan with guard

## CIRCUIT BREAKERS

2000A 3 Pole, UL-100% Rated Masterpact Circuit Breakers

Frame mounting

S LSI, G L SIG, P L SIG-P, 4th Digit Type

Right, left, rear mounted

1600A, 2000A 3 Pole, UL-100% Rated R-Frame Circuit Breakers

100% rated, 3-pole (UL/CSA/IEC) 5th Digit Rating

3-pole (IEC 947-2 rated)

1200A, 3 Pole, UL-100% Rated P-Frame Circuit Breakers

## EXHAUST

305 mm (12 in.) flange

Flexible fittings

18, 25 dBA Attenuation

305 mm (12 in.) muffler

305mm (12 in) spark arresting muffler

305 mm (12in.) elbow

## FUEL SYSTEM

3, 0-100 kPag, 4-20mA gas train pressure sensors

## GENERAL

US AID emblem

Special paint order

Digital diagnostic tool

Tool set

## GENERATOR

Generator air filter

European bus bars

Low voltage extension box

Cable access box

Bearing temperature detectors

## STARTING/CHARGING

20A, 24VDC battery charger

24V starting motors

45A, 24V charging alternator (requires engine driven pumps)