

# PRODUCT SPECIFICATIONS FOR G3520E

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## GENERATOR SET SPECIFICATIONS

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|                                  |          |
|----------------------------------|----------|
| <b>Maximum Continuous Rating</b> | 2022 ekW |
|----------------------------------|----------|

|                  |             |
|------------------|-------------|
| <b>Fuel Type</b> | Natural Gas |
|------------------|-------------|

|                                      |        |
|--------------------------------------|--------|
| <b>Maximum Electrical Efficiency</b> | 41.50% |
|--------------------------------------|--------|

|                               |      |
|-------------------------------|------|
| <b>Maximum Standby Rating</b> | 2022 |
|-------------------------------|------|

|                  |    |
|------------------|----|
| <b>Frequency</b> | 50 |
|------------------|----|

|            |      |
|------------|------|
| <b>RPM</b> | 1500 |
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## ENGINE SPECIFICATIONS

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|                     |        |
|---------------------|--------|
| <b>Engine Model</b> | G3520E |
|---------------------|--------|

|                     |                      |
|---------------------|----------------------|
| <b>Displacement</b> | 5248 in <sup>3</sup> |
|---------------------|----------------------|

|                   |    |
|-------------------|----|
| <b>Aspiration</b> | TA |
|-------------------|----|

|             |        |
|-------------|--------|
| <b>Bore</b> | 6.7 in |
|-------------|--------|

|               |        |
|---------------|--------|
| <b>Stroke</b> | 7.5 in |
|---------------|--------|

|                    |             |
|--------------------|-------------|
| <b>Fuel System</b> | Natural Gas |
|--------------------|-------------|

|                          |      |
|--------------------------|------|
| <b>Compression Ratio</b> | 11.9 |
|--------------------------|------|

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## GENERATOR SET DIMENSIONS

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|               |        |
|---------------|--------|
| <b>Length</b> | 271 in |
|---------------|--------|

|              |       |
|--------------|-------|
| <b>Width</b> | 79 in |
|--------------|-------|

|               |        |
|---------------|--------|
| <b>Height</b> | 107 in |
|---------------|--------|

|                            |          |
|----------------------------|----------|
| <b>Dry Weight - Genset</b> | 39306 lb |
|----------------------------|----------|

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# G3520E STANDARD EQUIPMENT

## CONTROL PANEL

EMCP 4.3

## AIR INLET

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

## COOLING

Standard CAT Flange

Right-Hand/Left-Hand Outlet Connections

Engine driven water pumps for jacket water and aftercooler

ANSI/DN adapter flange connections

## EXHAUST

Individual exhaust port and turbocharger outlet wired to Integrated Sensing Module (ISM) with Gas ECM providing alarms and shutdowns

Dry exhaust manifolds, insulated and shielded

## 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

Fuel filter

Engine installed, fuel metering valve

24V ETR Gas Shutoff Valve

Throttle plate, 24V DC actuator, controlled by GECM

## IGNITION SYSTEM

Individual Cylinder Detonation Sensitive Timing (DST)

Electronic Ignition System (controlled by GECM)

## GENERATOR

SR4B

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

Busbar connections

SR5

Winding temperature detectors

Permanent Magnet Excitation

Anti-condensation space heater

3-phase brushless, salient pole

#### GENERAL

RH Service

Crankshaft vibration damper and guard

Paint - Caterpillar Yellow except rails and radiators gloss black

## G3520E OPTIONAL EQUIPMENT

#### AIR INLET

Heavy duty air cleaner

Regular duty air cleaner

Air cleaner with precleaner

Mounting stand

#### CONTROL PANEL

Local NFPA99-110 Alarm Module w/LEDs

PL1000E/PL1000T Communications Module

Remote 24V-32V 8/16 Light Annunciator

Custom 8-Light Alarm Module

Engine Failure Relay

Synchronizing Module

#### CONTROL PANELS

Local alarm module

#### COOLING

Jacket water coolant heater

Cat Flange, ANS/DIN Adapter Flange

Engine Pumps

Aftercooler air lines, aftercooler core replacement

Inlet/Outlet connections

## EXHAUST

15/18/25 dBA Muffler Attenuation

305/356mm Flange/Exhaust Expanders, 305/406mm Flange and Exhaust Expander

356-406mm Flange and Exhaust Expander

Mufflers (15/18/25 dBA Attenuation) and spark-arresting muffler with ANSI companion flanges

305/360/406 mm Elbow Kits

Flexible Fittings

16" Spark Arresting Muffler

## FUEL SYSTEM

Gas Train (31.5 MJ/Nm<sup>3</sup> with inlet pressure 19.2 to 48.3 kPa (2.78 to 7 psi))

Gas Train 0-100 kPag, 4-20mA pressure sensors

Fuel Filter, Gas Filter

24VDC Gas Shutoff Valve, Gas Knockdown Regulator

## GENERATOR

Annunciator modules

Air filters, cable access box

Bearing temperature detectors

Low voltage extension box

16 Point/32 light annunciator with NFPA99-110/CSA282 configuration

Extension box, European bus bars

Generator air filter

Medium and high voltage generators and attachment

415/400/380, 3300/6600/11000 Volt Generator Options (50 Hz)

480/4160/13200 Volt Generator Options (60 Hz)

8/15/23M harness

8.7/15 kV Cross, Differential, Current Transformers (CCCT, DCT, CT)

Cable access box

## GOVERNING SYSTEM

Load share module

## STARTING/CHARGING

Battery disconnect switch

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

24V Starting Motors

20A Battery Charger

Battery with cables and rack (shipped loose)