



HIGHER EFFICIENCY LOWER COSTS



THE CAT[®] G3500K SERIES NATURAL GAS GENERATOR SETS
For 1.5 – 2.5 eMW Applications

THE BEST JUST GOT **BETTER**

THE CAT[®] G3500K SERIES

The Cat[®] K Series portfolio is our most efficient range of gas generator sets and is engineered for combined heat and power (CHP) and continuous applications, providing reliable and cost-effective power.

Upgraded to better meet today's challenges, these innovative new generator sets deliver more efficient power in more places at a lower cost. The K series generator sets are built with longer-lasting parts than previous models, and remote asset monitoring is available, giving you added peace of mind. Advanced controls, improved serviceability, and greater flexibility make them the right choice for your business.



WHEN 90% OF YOUR RUNNING COST IS FUEL, IT PAYS TO BE EFFICIENT

In a shifting energy landscape, can you afford less than the best? The new K series delivers best-in-class electrical efficiency, delivering more power at a lower total fuel cost, reducing your Total Cost of Ownership (TCO).

- + Best-In-Class Electrical Efficiency
- + Peak Performance Whenever You Need It
- + Improved Thermal Efficiency
- + Runs On More Fuels, In More Applications

SAVE
\$350,000

The higher efficiency of the K series can boost your bottom line by using less fuel to deliver more power. For example, the G3520K can save you up to \$350,000* on fuel alone.

* As compared with the G3520H operating at full load for 8,000 hours per year on \$9.81/GJ fuel over a ten-year period.

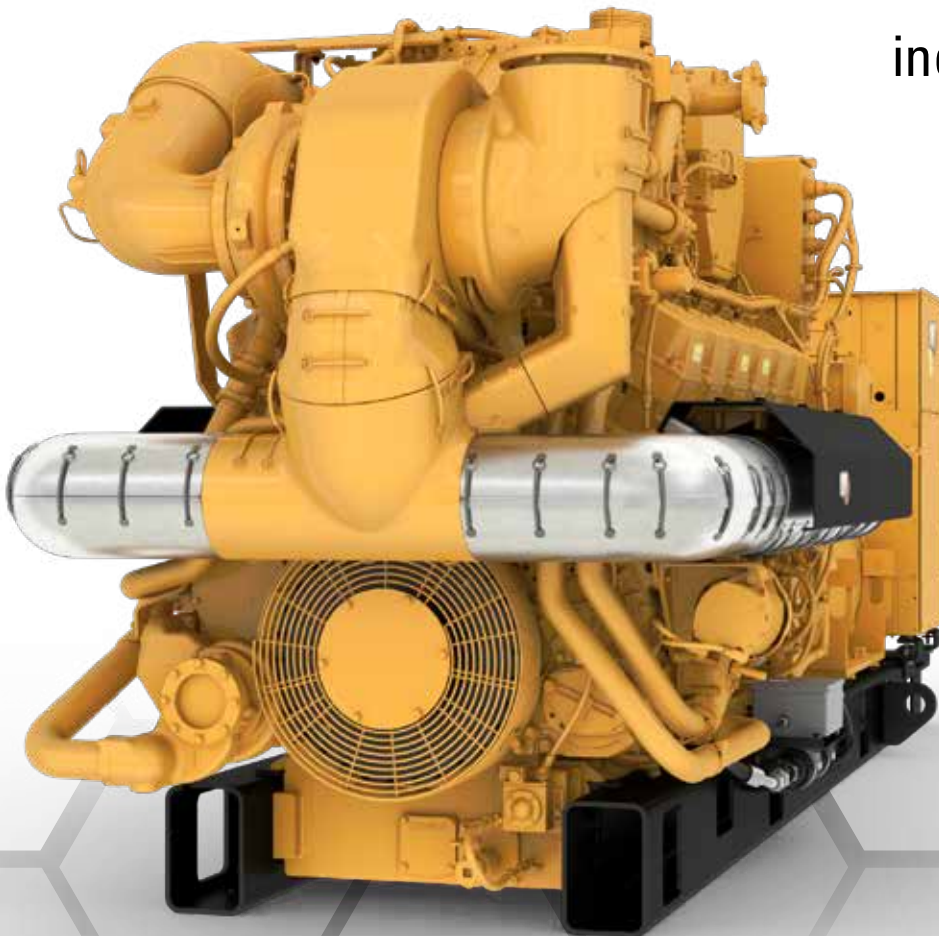
USE MORE FUELS...

K series generator sets run at 100% rated power with more fuels than previous models and can run down to 60 methane number without derate.

Fuels include:

- + Natural Gas
- + Propane
- + 25% Hydrogen Blends*
- + Coal Mine Methane (CMM)*
- + Medium/High Quality Biogas*
- + Agricultural Gas*
- + Landfill and Sewage Gas*

*These fuels will be available later in 2026.



IN MORE APPLICATIONS...

Each generator set in the innovative G3500K series is optimised for CHP/cogeneration applications, with a total efficiency of up to 89.6%.* The reliability, durability, efficiency, and improved design of the K series make them ideal for any continuous power need, even in extreme climate conditions.

IN MORE PLACES...

The K series supports operation without derating in harsh environments, with better high-altitude capability and higher ambient temperature performance than previous models in this power range. Intense heat, peak altitudes, urban landscapes, or off-the-grid sites – wherever they're placed, they handle every power need.

WITH BETTER CONTROLS...

When you demand the best in smart energy management, choose a Cat power asset, with built-in Cat Energy Control System (ECS). Caterpillar offers a full suite of energy controllers. Whether your K series generator set is part of a microgrid, a multiple-generator set plant, or is a sole gas generator on site, we have a scalable controller solution designed for your application.

*Total generator set efficiency of 89.6% running at 500 mg Nox, 50 Hz, JW 88C

IMPROVED CONTROLS			
FUEL SYSTEM	AIR SYSTEM	HUMIDITY MANAGEMENT SYSTEM	IGNITION AND COMBUSTION
+ Gas shut off valve with proof of closure + Pressure check and leak detection	+ Turbo surge protection strategy + New pressure, temperature, and speed sensors	+ 24V coolant diverter valve + Additional temperature sensors + DIN compliant connections	+ Internal ignition harness to assist with EMI/EMC compliance + Enhanced combustion diagnostics using In Cylinder Pressure Sensor (ICPS) + Improved detonation control

GRID CODE COMPLIANCE

Caterpillar engineers conduct robust and extensive tests on our generator sets to confirm that they are fully compliant with the main grid codes worldwide. For the K Series, we have performed over 700 fault ride through tests to verify that it is robust and capable of withstanding the worst-case fault conditions while providing support to the grid.

MEET ENERGY NEEDS, NOW AND IN THE FUTURE

As your energy needs evolve, so will your solutions. By choosing a supplier who can deliver not only power generation equipment but also the controls, switchgear, monetization tools, and asset monitoring technology, you optimize your project and avoid costly rework down the line – saving valuable time and resources. At the end of the day, you can focus on your business and what you do best. We give you the power to make that happen.



DELIVER MORE POWER, FASTER

The improved performance of the K series helps you accept power loads more quickly and produce more power at a lower cost. They have increased power density compared to previous models, start more quickly, accept higher loads, and reach full load capacity 40% faster, with G2 transient capability.



THE G3500K SERIES BY THE NUMBERS

For
1.5 – 2.5 eMW
Applications

G3520K Continuous Rating 2536/2520 ekW @ 0.8pf | G3512K Continuous Rating 1530/1502 ekW @ 0.8pf

READY FOR EXTREMES

70 %
HIGHER
ALTITUDE
CAPABILITY

10 %
HIGHER AMBIENT
TEMPERATURE
CAPABILITY

READY FOR LOWER METHANE

65 G3520H

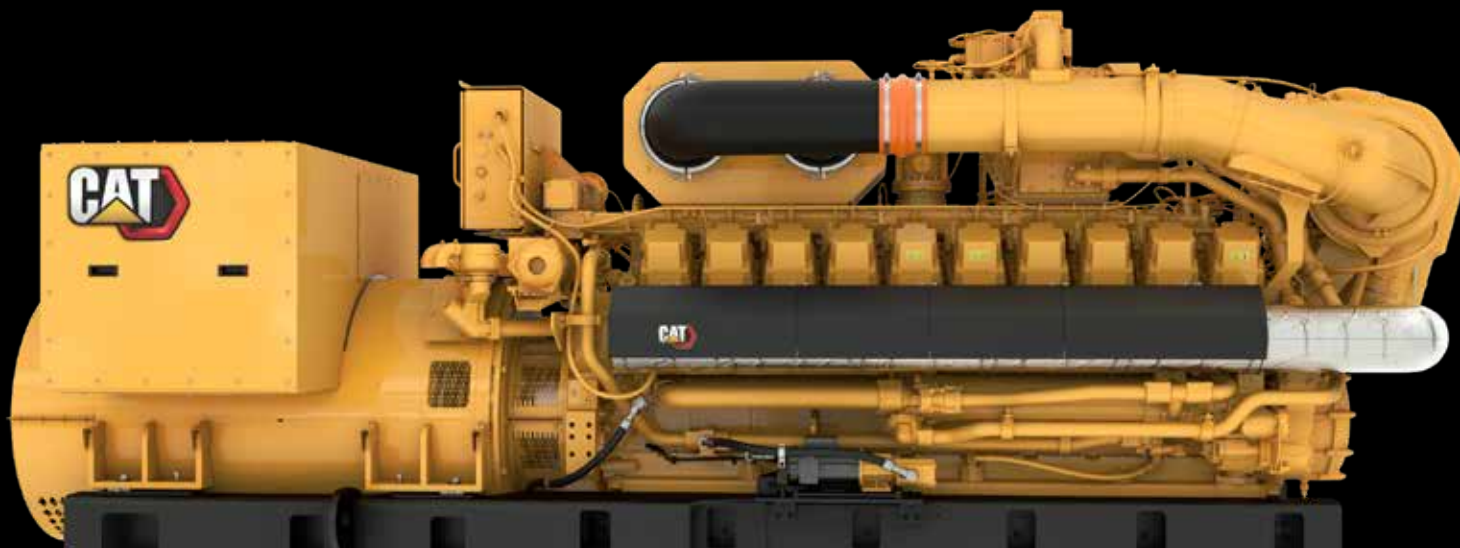
60 K SERIES

LOWER COSTS

\$350,000
ON FUEL COSTS*

PLUS
IMPROVED TCO

* Based on comparison of the G3520H and G3520K operating at full load for 8,000 hours per year on \$9.81/GJ fuel over a ten-year period.



FASTER STARTUP AND LOAD ACCEPTANCE

40%
MORE
RESPONSIVE

H SERIES
G3512K **UP TO 10 MINUTES***
G3520K **4.5 MINUTES***
G3520K **4.5 MINUTES***

*Start and 100% full load time.

SMALLER FOOTPRINT

60 HZ
G3512K

8%
LESS THAN
THE SIMILAR
MODELS

60 HZ
G3520K

6%
LESS THAN
THE SIMILAR
MODELS

INCREASED EFFICIENCY

↑ 2.8%-p

THERMAL
EFFICIENCY
G3520K**

↑ 1.2%-p

ELECTRICAL
EFFICIENCY
G3520K**

↑ 1.8%-p

THERMAL
EFFICIENCY
G3512K**

↑ 0.7%-p

ELECTRICAL
EFFICIENCY
G3512K**

**Calculated for most optimized efficiency versus the Cat G3500H products, using the mean percent point delta.

SMALLER SPACES, GREATER SERVICEABILITY, GLOBAL SUPPORT

The K Series requires less space than previous G3500 models – and significantly less than generator sets from other manufacturers – making installation easier and leaving more space for servicing. They are also equipped with enhanced combustion diagnostics using In Cylinder Pressure Sensor (ICPS) that improve diagnostic ability. They improve detonation control and provide crucial information about combustion processes right from the source. This makes diagnostics more accurate and allows you to identify and repair problems faster.

Plus, you'll have the Cat global dealer network standing behind you, helping you effectively maintain and manage your generator set to get the most from your investment throughout its life.



DO MORE FOR LESS

CONTACT US TO LEARN MORE





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