

CAT[®] CG260 Series Gas Generator Sets



CAT® CG260

SMARTER ENERGY SOLUTIONS

COMMERCIAL AND INDUSTRIAL FACILITIES

Facilities such as manufacturing plants, resorts, shopping centers, office or residential buildings, universities, data centers and hospitals can simultaneously reduce operating costs and carbon footprint.

ELECTRIC UTILITIES

Stationary and containerized gas power plants supply electric utilities and district energy facilities around the world with continuous grid and peak demand support.

MINES

Many mining operations can increase mine safety and reduce carbon emissions with coal gas, while others are realizing the benefits of onsite gas power generation to support greenfield site development.

AGRICULTURE AND FOOD / BEVERAGE PROCESSING

Biogas, a useful byproduct of the anaerobic digestion of organic waste, is created by food processors, ethanol and biodiesel manufacturers and farms around the world as a renewable fuel resource for Cat® powered electricity generation.

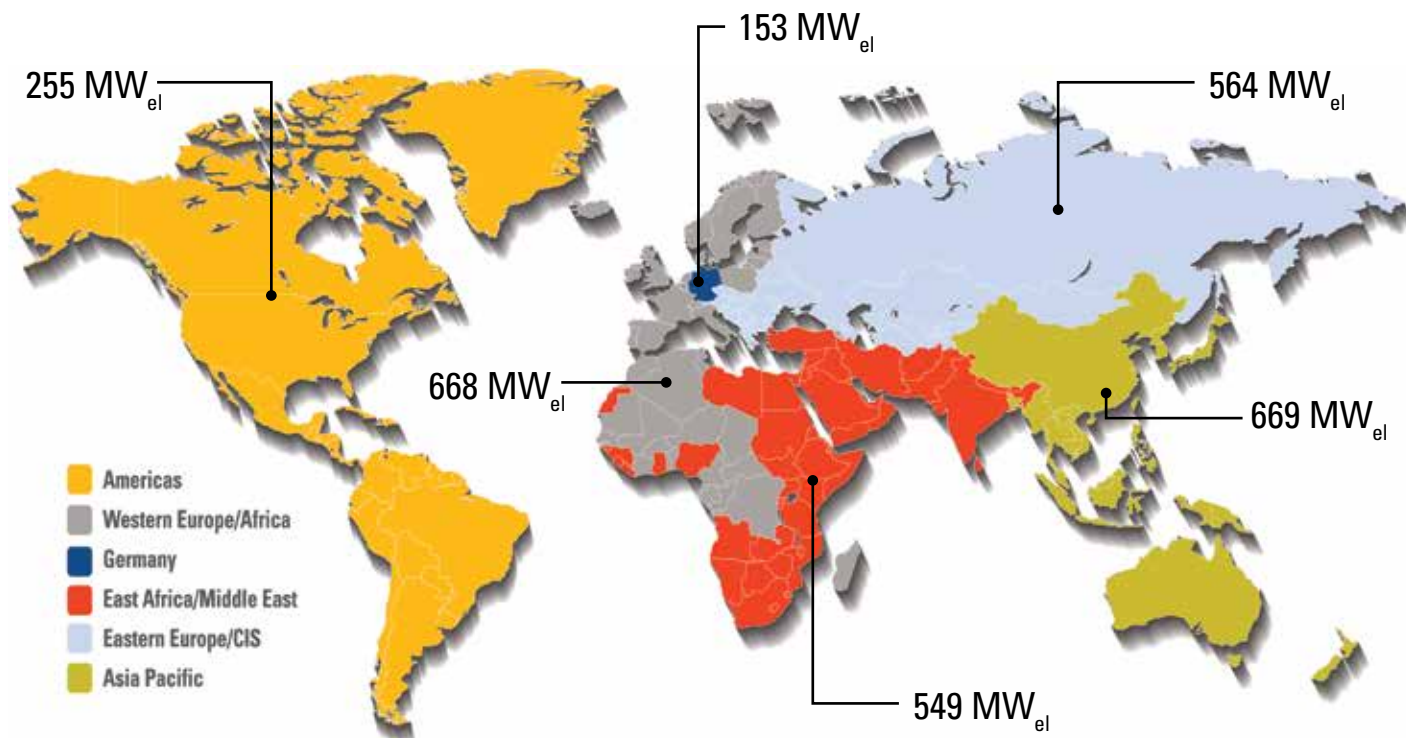
LANDFILLS AND WASTEWATER TREATMENT PLANTS

Landfill and sewage gases are generated by communities around the world as part of sanitary process infrastructure. Instead of destroying or flaring the methane gas produced, communities use this gas as fuel for a more sustainable approach to power.

GREENHOUSES

Our gas generator sets produce electricity that can be used onsite or sold to the local grid. They also produce hot water to heat greenhouses and carbon dioxide to be used as an organic fertilizer for increased crop production.

Installed capacity of 2,858 MW_{el} with more than 700 generator sets worldwide



MEETING YOUR NEEDS HAS SHAPED OUR HISTORY

We understand what it takes to deliver a successful gas power generation system, and it starts with a core machine designed for efficiency and reliability. Since the 1920s, our engineers have been blueprinting and building engines for power production. Although the technology has changed over the years, the philosophy hasn't: deliver the most reliable power generation at the lowest possible owning and operating cost. Today, we not only manufacture power generation equipment, we also provide customized project financing and trade solutions via Cat Financial.

THE COMPLETE SOLUTION

We're your complete gas solutions partner. From heat recovery systems to exhaust aftertreatment that complies with the world's most stringent emission standards, we're committed to meeting your specific power needs. And with electrical systems such as master controls and paralleling switchgear, electrical distribution switchgear and uninterruptible power supplies (UPS) that can meet either UL or IEC requirements, we're ensuring you have a complete, integrated system.

PRODUCT SUPPORT WORLDWIDE

Your gas power system is supported by our factory trained global network of Cat dealers. With more than 1,600 dealer locations in 200 countries, your equipment will be ordered, delivered, installed and commissioned in consultation with a local expert. And our dealers are available for ongoing power generation support. Ask about oil and fuel services, preventive maintenance and comprehensive customer support agreements.

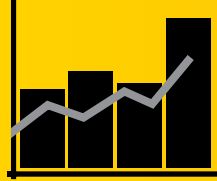
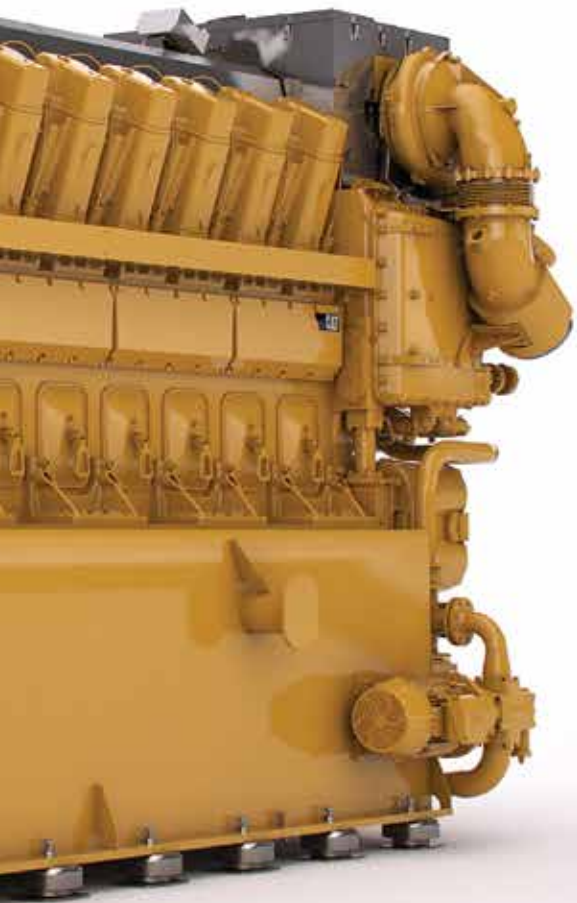
LOWER LIFE CYCLE COST

With longer maintenance intervals, higher fuel efficiency and competitive repair options, we're delivering the lowest total owning and operating costs. When you design your facility within the Cat Application and Installation Guidelines, you can expect generator set availability up to 94 percent of planned operating hours annually. It all adds up to a strong return on your investment, year after year.

CG260:

**HIGH PERFORMANCE WITH
LOW OPERATING COSTS**





HIGHLY EFFICIENT

With recent improvements in turbocharging, system control and optimized pre-chamber spark plugs, the CG260 gas generator now delivers electrical efficiencies up to 44.6 percent.



LOWER OPERATING COSTS

Optimized engine components mean the CG260 consumes up to 30 percent less lubricating oil than competing gas generators, which means more money stays in your company's pockets.



GREATER AVAILABILITY

The CG260 utilizes particle free combustion with chamber plugs for extended maintenance intervals and improved heat utilization. The CG260 can run on average 200 hours per year longer than competitive systems.



SYSTEM CONTROL

Control the entire system, not just the engine, with the Cat Total Electronic Management System. Control or monitoring of ancillary equipment such as heat recovery modules, exhaust aftertreatment and fuel treatment systems becomes seamless. Features like temperature monitoring for each cylinder and anti-knock control allow for maximum power output and the best possible fuel utilization, even with fluctuating gas composition.



HIGH ALTITUDE AND AMBIENT PERFORMANCE

The new high-boost, waste-gated A140 turbo allows the CG260 to operate at full power up to 45° C (113° F) intake air, and supply stable transient load response at higher altitudes.

50 Hz PRODUCT PERFORMANCE

ENGINE TYPE	UNITS	CG260-12		CG260-16		CG260-16 (UPGRADE)	
Bore/stroke	mm in	260/320	10.24/12.60	260/320	10.24/12.60	260/320	10.24/12.60
Displacement	dm ³ in ³	203.9	12442.8	271.8	16586.3	271.8	16586.3
Speed	min ⁻¹ rpm	1,000		1,000		1,000	
Mean piston speed	m/s ft/s	10.7	35.1	10.7	35.1	10.7	35.1
Length ¹⁾	mm in	7,860	309	9,271	365	9,272	365
Width ¹⁾	mm in	2,660	105	2,790	110	2,790	110
Height ¹⁾	mm in	3,390	133	3,390	133	3,390	133
Dry weight genset	kg lb	43,100	95,018	51,200	112,876	51,400	113,316

NATURAL GAS

ENGINE TYPE	UNITS	CG260-12		CG260-16		CG260-16 (UPGRADE)	
Electrical power ²⁾	kW _e	3,333		4,300		4,500	
Mean effective pressure	bar psi	20.0	290.1	19.4	281.4	20.3	294.4
Thermal output (+/-8 %) ³⁾	kW Mbtu/hr	2,862	9,772	3,698	12,626	3,668	12,524
Electrical efficiency ²⁾	%	43.9		44.1		44.6	
Thermal efficiency ²⁾	%	42.6		42.7		43.1	
Total efficiency ²⁾	%	86.5		86.8		87.7	

NO_x ≤ 500 mg/Nm³; lg/bhp-h ⁴⁾

BIOGAS

ENGINE TYPE	UNITS	CG260-16	
Electrical power ²⁾	kW _e	3,770	
Mean effective pressure	bar psi	17.0	246.6
Thermal output (+/-8 %) ³⁾	kW Mbtu/hr	3,196	10,912
Electrical efficiency ²⁾	%	43.0	
Thermal efficiency ²⁾	%	41.9	
Total efficiency ²⁾	%	84.9	

NO_x ≤ 500 mg/Nm³; lg/bhp-h ⁴⁾

Sewage gas (65% CH₄ / 35% CO₂)

Biogas (60% CH₄ / 32% CO₂, Rest N₂)

Landfill gas (50% CH₄ / 27% CO₂, Rest N₂)

Minimum heating value Hu = 18MJ/Nm³ or 457Btu/scf.

Dry exhaust pipes

1) Transport dimensions of genset; components set up separately must be taken into consideration.

2) According to ISO 3046-1 at U = 11 kV, cosphi = 1,0 and a minimum methane number of MN 70 for natural gas.

3) Exhaust gas cooled to 120° C (248° F) for natural gas and 180° C (356° F) for biogas.

4) NO_x ≤ 500 mg/Nm³; lg/bhp-h; exhaust gas dry at 5 % O₂.

60 Hz PRODUCT PERFORMANCE

ENGINE TYPE	UNITS	CG260-12		CG260-16		CG260-16 (UPGRADE)	
Bore/stroke	mm in	260/320	10.24/12.60	260/320	10.24/12.60	260/320	10.24/12.60
Displacement	dm ³ in ³	203.9	12442.8	271.8	16586.3	271.8	16586.3
Speed	min ⁻¹ rpm	900		900		900	
Mean piston speed	m/s ft/s	9.6	31.5	9.6	31.5	9.6	31.5
Length ¹⁾	mm in	8,000	315	9,420	371	9,420	371
Width ¹⁾	mm in	2,790	110	2,790	110	2,790	110
Height ¹⁾	mm in	3,390	133	3,390	133	3,390	133
Dry weight genset	kg lb	40,650	89,617	52,400	115,521	52,400	115,521

NATURAL GAS

ENGINE TYPE	UNITS	CG260-12		CG260-16		CG260-16 (UPGRADE)	
Electrical power ²⁾	kW _e	3,000		4,000		4,050	
Mean effective pressure	bar psi	20.1	291.5	20.2	293	20.4	295.9
Thermal output (+/-8 %) ³⁾	kW Mbtu/hr	2,539	8,669	3,411	11,647	3,252	11,104
Electrical efficiency ²⁾	%	43.9		43.8		44.3	
Thermal efficiency ²⁾	%	42.1		42.4		42.6	
Total efficiency ²⁾	%	86		86.2		86.9	

NO_x ≤ 500 mg/Nm³; lg/bhp-h ⁴⁾

BIOGAS

ENGINE TYPE	UNITS	CG260-16	
Electrical power ²⁾	kW _e	3,510	
Mean effective pressure	bar psi	17.0	246.6
Thermal output (+/-8 %) ³⁾	kW Mbtu/hr	2,880	9,833
Electrical efficiency ²⁾	%	43.3	
Thermal efficiency ²⁾	%	40.6	
Total efficiency ²⁾	%	83.9	

NO_x ≤ 500 mg/Nm³; lg/bhp-h ⁴⁾

Sewage gas (65% CH₄ / 35% CO₂)

Biogas (60% CH₄ / 32% CO₂, Rest N₂)

Landfill gas (50% CH₄ / 27% CO₂, Rest N₂)

Minimum heating value Hu = 18MJ/Nm³ or 457Btu/scf.

Dry exhaust pipes

1) Transport dimensions of genset; components set up separately must be taken into consideration.

2) According to ISO 3046-1 at U=4,16 kV, cosphi = 1,0 and a minimum methane number of MN 80 for natural gas.

3) Exhaust gas cooled to 120° C (248° F) for natural gas and 180° C (356° F) for biogas.

4) NO_x ≤ 500 mg/Nm³; lg/bhp-h; exhaust gas dry at 5 % O₂.

LET'S DO THE WORK.™

**For more information and to contact your local Cat dealer,
visit cat.com/powergeneration**

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