Eco Power – Gaseous Generator CIPR-25Z Model

Specification	CIPR-25Z
Engine	
Make	Zenith
Model	2.8L
Ignition System	Coil Over
Total Displacement	2800cc
Aspiration	Natural
Speed	1800 I
Standby Power Rating	38 kVa, 30 kW
Prime Power PRP (LP Gas)	31 kVa, 25 kW
Lube Oil Capacity (Std Pan)	3.8 liters
Alternator	
Make	Mecc Alte
Model	ECP28-VL
Regulator	DSR
Main Circuit Breaker	100 amps
Power Distribution	
Standard Distribution Panel:	• 4 x 120v GFCI, 20 Amp Duplex • 2 x 125/250v 30 Amp twistlock • 2 x 125/250v 50 amp twistlock • 1 x Set of 400amp Rated Cam Lock Plugs (5 Wire) • Hard Wire Lugs
Machine	
Dimensions	80.5"x 44"x 50"
Weight (*Changes by Spec)	2,555 lbs

Stephenson's RENTAL SERVICES
HIGHER STANDARDS, TOTAL COMMITMENT

Powered by proven prime rated engines.

ECO POWER

CIPR Prime - Designed for propane and natural gas operation.

Proven fuel cost and emissions reduction vs. diesel.

Field proven reliability that keeps your operation powered!

Designed for portable rental applications - Our commitment is to develop the highest quality equipment in order to provide real world solutions for demanding applications.

We use Industrial Zenith engines—they power productivity. But power alone isn't enough. With today's razor-thin profit margins and increasingly volatile fuel prices, companies expect more and more of their engines. We utilize durable, fuel-flexible, emission-conscious engines that don't compromise power or performance.

These engines are purpose built for gaseous fuel operation - using both vapor propane or natural gas.

- Continuous duty engine design.
- Engine head components purpose built for dry NG/LP
- Advanced catalytic converter system reduced environmental impact

Prime Power Design

Prime rated, 24/7 operation gaseous fuel generators.

No 755-1001f Units are designed to conform to Canadian Electrical Code

- The unit requires a minimum of 7" and a maximum of 14" of gas pressure.
- This is a true 25kW prime power unit, most diesels are 18-20kW.

Diesel vs Natural Gas

ECO POWER

Units: Metric

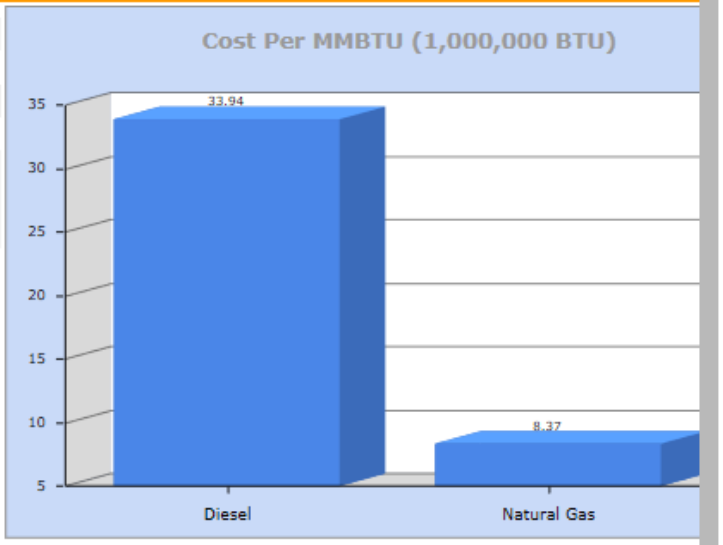
Gas Fuel Source: Natural Gas

GAS POWER OPERATING COST AND EMISSIONS CALCULATOR

Delivered Fuel Cost (¢)			Cost Per MMBTU ($)
1.25	$/Litre	Diesel	$33.94
0.296	$/M3	Natural Gas	$8.37

*Energy Content Source: National Energy Board Canada

You are not purchasing fuel you are purchasing energy. Gaseous fuels provide extremely competitive operating costs and reduced emmisions outputs over diesel engines.



Generator Model:	CIPR-25P	
Generator Voltage:	240	
Engine:	3.0L GM	
Configuration:	I4, E-Controls	
Standby Power:	31.25 kVa / 25 kW	0
Prime Power:	28.75 kVa / 23 kW	
Standby Amps:	75 Amps*	
Prime Amps:	69 Amps*	
Phase:	3Ø	

Fuel Consumption (PRP=Prime Power)

Fuel Consumption @ 100% PRP :	9.6 M3/HR	339,000	BTU/HR
Fuel Consumption @ 75% PRP :	7.4 M3/HR	261,000	
Fuel Consumption @ 50% PRP :	6 M3/HR	212,000	
Fuel Consumption @ 25% PRP :	5.1 M3/HR	180,000	

Emissions Output (1 Hour)

Propane and Natural Gas fuel source have significant emmisions reductions vs. diesel engines of comparable output. On average there is a 170-200% reduction, even of full TIER IV machines

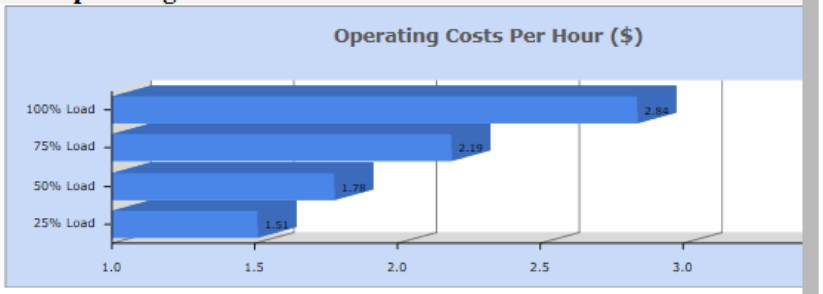
Pollution Control Efficiency	~199% Reduction
CO Ouput	~174% Reduction
Particulate Matter Output	~190% Reduction

- This calculated savings of Diesel vs Natural Gas assumes the above delivered costs ($1.25/litre for diesel, and $0.296/Cubic metre for NG) and is based on the CIPR-25
- This can be customized based on your delivered actual costs

Diesel vs Natural Gas

Gaseous Operating Costs Per Hour

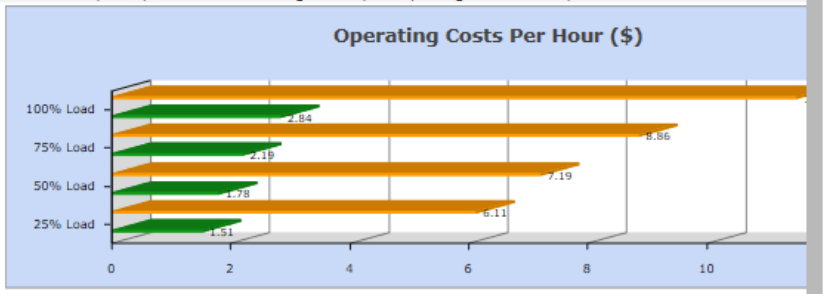
Cost Per Hour ($)	
100% Load	$2.84 Per Hr
75% Load	$2.19 Per Hr
50% Load	$1.78 Per Hr
25% Load	$1.51 Per Hr
Cost Per Day ($)	
100% Load	$68.20 Per Day
75% Load	$52.57 Per Day
50% Load	$42.62 Per Day
25% Load	$36.23 Per Day



Comparable Diesel Cost Per Hour

(Based on similar engine efficiency - For detailed comparion please submit diesel engine make/model, average electrical load)

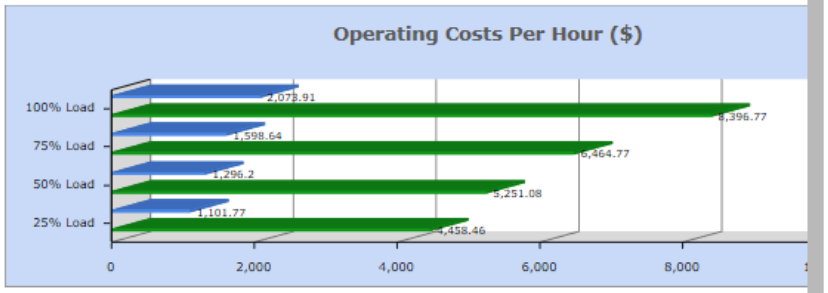
Cost Per Hour ($)	
100% Load	$11.50 Per Hr
75% Load	$8.86 Per Hr
50% Load	$7.19 Per Hr
25% Load	$6.11 Per Hr
Cost Per Day ($)	
100% Load	$276.12 Per Day
75% Load	$212.59 Per Day
50% Load	$172.68 Per Day
25% Load	$146.61 Per Day



Comparable Diesel Cost Per Month

(Based on Similar Engine Efficiency - For detailed comparion please submit comparable diesel engine)

Cost Per Month ($) Natural Gas	
100% Load	$2,073.91 Per Month
75% Load	$1,598.64 Per Month
50% Load	$1,296.20 Per Month
25% Load	$1,101.77 Per Month
Cost Per Month ($) Diesel	
100% Load	$8,396.77 Per Month
75% Load	$6,464.77 Per Month
50% Load	$5,251.08 Per Month
25% Load	$4,458.46 Per Month



- **$6,323 savings** per month per unit vs diesel fuel, or **75% Savings** (at 100% load). In addition, the customer can save an additional $500 per month by avoiding the rental of a fuel cube, as well as the cost of downtime when a unit runs out of diesel fuel.

Diesel vs Propane

ECO POWER

Units: Metric

Gas Fuel Source: Propane Gas

GAS POWER OPERATING COST AND EMISSIONS CALCULATOR

Delivered Fuel Cost (¢)			Cost Per MMBTU ($)
1.25	$/Litre	Diesel	$33.94
0.65	$/Litre	Propane Gas	$26.86

*Energy Content Source: National Energy Board Canada

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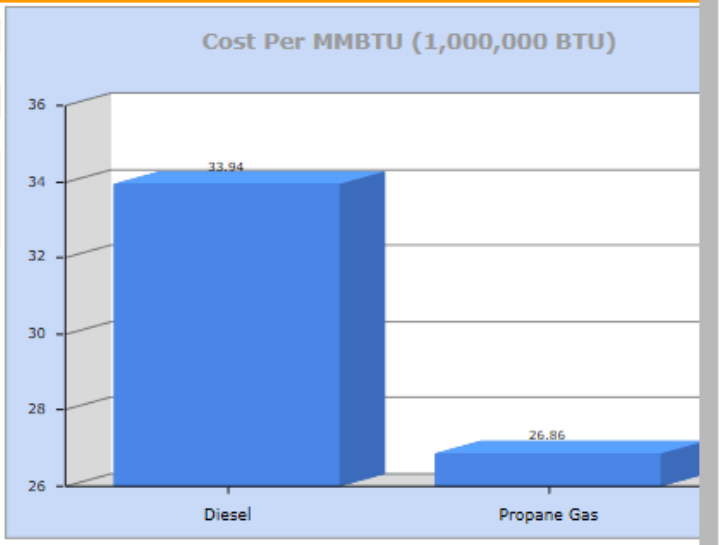


Generator Model:	CIPR-25P	
Generator Voltage:	240	
Engine:	3.0L GM	
Configuration:	I4, E-Controls	
Standby Power:	35 kVa / 28 kW	0
Prime Power:	32.5 kVa / 26 kW	
Standby Amps:	84 Amps*	
Prime Amps:	78 Amps*	
Phase:	3Ø	

Fuel Consumption (PRP=Prime Power)

Fuel Consumption @ 100% PRP :	14.4 LPH	348,480	BTU/HR
Fuel Consumption @ 75% PRP :	12.1 LPH	292,820	
Fuel Consumption @ 50% PRP :	9.9 LPH	239,580	
Fuel Consumption @ 25% PRP :	6.9 LPH	166,980	

Emissions Output (1 Hour)

Propane and Natural Gas fuel source have significant emmisions reductions vs. diesel engines of comparable output. On average there is a 170-200% reduction, even of full TIER IV machines

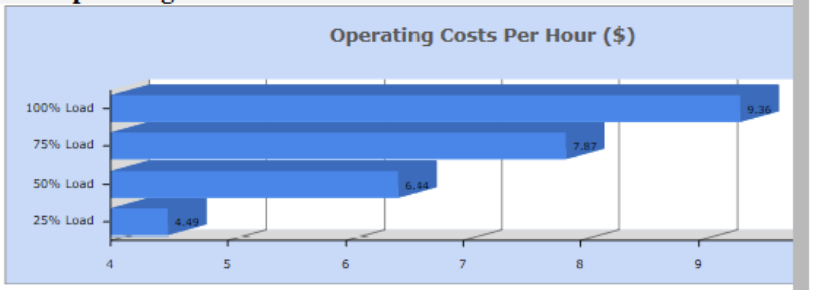
Pollution Control Efficiency	~199% Reduction
CO Ouput	~174% Reduction
Particulate Matter Output	~190% Reduction

- This calculated savings of Diesel vs Liquid Propane assumes the above delivered costs ($1.25/litre for diesel, and $0.65/litre for Propane) and is based on the CIPR-25
- This can be customized based on your delivered actual costs

Diesel vs Propane

Gaseous Operating Costs Per Hour

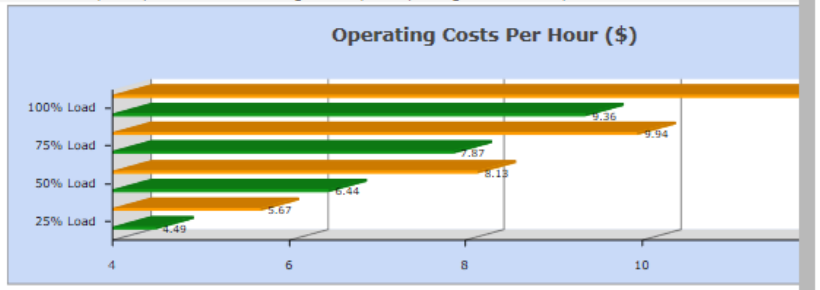
Cost Per Hour ($)	
100% Load	$9.36 Per Hr
75% Load	$7.87 Per Hr
50% Load	$6.44 Per Hr
25% Load	$4.49 Per Hr
Cost Per Day ($)	
100% Load	$224.64 Per Day
75% Load	$188.76 Per Day
50% Load	$154.44 Per Day
25% Load	$107.64 Per Day



Comparable Diesel Cost Per Hour

(Based on similar engine efficiency - For detailed comparion please submit diesel engine make/model, average electrical load)

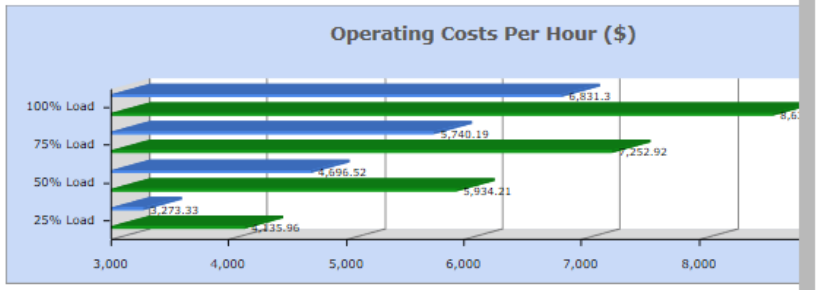
Cost Per Hour ($)	
100% Load	$11.83 Per Hr
75% Load	$9.94 Per Hr
50% Load	$8.13 Per Hr
25% Load	$5.67 Per Hr
Cost Per Day ($)	
100% Load	$283.84 Per Day
75% Load	$238.50 Per Day
50% Load	$195.14 Per Day
25% Load	$136.01 Per Day



Comparable Diesel Cost Per Month

(Based on Similar Engine Efficiency - For detailed comparion please submit comparable diesel engine)

Cost Per Month ($) Propane Gas	
100% Load	$6,831.30 Per Month
75% Load	$5,740.19 Per Month
50% Load	$4,696.52 Per Month
25% Load	$3,273.33 Per Month
Cost Per Month ($) Diesel	
100% Load	$8,631.58 Per Month
75% Load	$7,252.92 Per Month
50% Load	$5,934.21 Per Month
25% Load	$4,135.96 Per Month



- **$1,800 savings** per month per unit vs diesel fuel, or **21% Savings** (at 100% load). In addition, the customer can save an additional $500 per month by avoiding the rental of a fuel cube, as well as the cost of downtime when a unit runs out of diesel fuel.