



FCX
SYSTEMS

**Ground POWER Solutions
For All Generations Of Aircraft**

FCX Systems, Inc. designs and manufactures a 90-120KVA diesel generated 400HZ power unit built for rugged demand, high performance and ease of operation. The performance and flexibility of this design is unparalleled.

The Cummins OSB3.3 110 HP and QSB4.5 155 HP, Tier III engine is quiet and efficient combined with a 400HZ generator with superior regulation. With almost unlimited parameter options on the standard LCD, such as under and over voltage settings, E & F interlock safety circuit and override capabilities, multiple engine performance parameters, and fault logs, this unit will meet the most difficult applications.

The FCX GPU line incorporates aluminum covers, and an optional steel fuel tank for increased life expectancy. There are five hinged access doors for ease of maintenance. The trailer has a fifth-wheel design with drum brakes for maneuverability and reliability. The side cable trays are part of the trailer to help reinforce the sides and acts like bumpers to protect the unit. A low fuel shut off incorporated with a beacon and instrument panel indicator will keep the unit from running out of fuel. The anti-restart ignition is an included feature that will keep the operator from accidentally engaging the starter. The FCX GPU090-C-1 and FCX GPU120-C-2 are members of a family of high performance GPUs designed to be the smallest and lightest of its kind.

UNIT PERFORMANCE

Voltage Regulation	+/- 1% Maximum
Voltage Recovery	Meets or exceeds limits of MIL-STD-704F, typically less than 50 milliseconds with a 100% load change
MTTR	Mean time to repair: less than 30 minutes



ENGINE SPECIFICATIONS

Cummins OSB3.3 110 HP, QSB4.5, 155 HP, Tier III diesel at 2000RPM. Other engine manufacturers available.

Electronic controlled, turbo charged, after cooled

Low fuel shutoff

Low oil pressure shutoff

High water temperature shutoff

PERFORMANCE

Rating: 120kVA, 3 phase, 4 wire, 115/200 VAC continuous

Rating: 90kVA, 3 phase, 4 wire, 115/200 VAC continuous

If equipped with dual outlets, each outlet 90KVA max

Meets or exceeds MIL-STD-704F Electrical power quality requirements

Low fuel warning and shutdown, contactor on, over/under voltage, over/ under frequency

PROTECTIONS

Meet MIL-STD-704F

Overvoltage: 118 volts L – N, within .1 seconds

Undervoltage: 108 volts L – N, within .1 seconds

Overfrequency: 420 Hz in 1 second

Underfrequency: 380 Hz in 1 second

ENVIRONMENTAL

Operating temperatures: -25°F to +125°F

Relative humidity 0 – 100% noncondensing

UNIT SPECIFICATIONS

Length: 130 in. with the tow bar up

Width: 70 in.

Height: 70 in. to the roof of the unit

Weight: 4500 lbs. without fuel

VOLTAGE

Transient Voltage recovery time within +/- 1% in 100 milliseconds

Within +/- 20% deviation upon application/removal of 100% load rating

Modulation: does not exceed 0.5% of steady state voltage

FINISH

Aluminum enclosure

Powder coated with an automotive finish with resistance to corrosive liquids

Standard color is arctic white. Custom colors are free with a paint chip, swatch or identification number

INCLUDED OPTIONS

Fuel/water separator

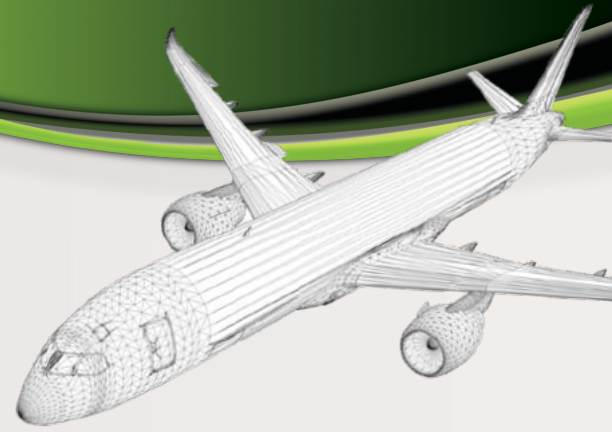
Stainless steel fuel tank

Low fuel shut off

Blue beacon low fuel light

Running lights

Anti-restart ignition



OVERLOAD

125% rated load for 5 minutes

150% rated load for 1 minute

Each Output: 325 amps for 5 minutes

FREQUENCY

Regulation: +/- 1% steady state

Transient recovery: to within +/- 5HZ in < 2 seconds

Modulation: 0.25% (1Hz)

TRAILER

4 wheel: 6:00 x 9 tires

5th wheel steering

Towbar activated drum type brakes

Towbar stop 3 in. from ground to prevent toe injuries

REGULATIONS

Voltage Regulation: +/- 1% no load to full load

Voltage adjust: +/- 15 volts

Individual harmonic content (< 2 %)

Line drop compensations: Automatic up to 5%

INSTRUMENTATION/DISPLAY

Engine: Voltmeter, oil pressure, coolant temperature, RPM, fuel level, hour meter

Generator: LED meters consisting of voltmeter, frequency meter and amp meter

OPTIONS AND ACCESSORIES

Attached fire extinguisher

Coolant heater kit

Tie down rings

Forklift pockets

Amber strobe warning light



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Engineered for Endurance

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