

GPU090-28VDC thru
GPU180-28VDC
FCXTREME

35+
YEARS IN BUSINESS
Established 1987

FCX
SYSTEMS

Engineered for Endurance
MADE IN THE USA SINCE 1987



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



Introducing the latest in Diesel Ground Power Unit design from FCX Systems. FCX System engineers in cooperation with Cummins application engineers have achieved the next level of diesel ground power unit utilizing the Cummins Stage V power unit platform.

With both FCX Systems and Cummins being synonymous with reliability, durability, and performance, it only made sense to combine the two. The GPU090, GPU090-28VDC, GPU120, and GPU120-28VDC family of DGPU utilizes the latest QSB4.5L, Stage V, while the GPU180 and GPU180-28VDC is powered by the QSB6.7L, Stage V engine. Our diesel GPU line will now produce more power and consume less fuel consumption, all while reducing harmful engine emissions. Ruggedized design along with ease of use control panel make for a supremely reliable system.

FCXTREME
GPU

Through an innovative design, advanced diagnostic and logging systems, and rugged modular construction, FCxtreme Series products assure maximum power availability and minimal maintenance time.

FCX Systems has been serving the military, commercial, and industrial markets since 1987. Our knowledgeable, experienced sales staff is waiting to review your requirements and specifications. Please call us at **(304)983-0400** or submit your inquiry via email to **sales@fcxinc.com**. We are eager to provide your solution.

Specifications below based on GPU090-28VDC thru GPU180-28VDC as indicated.

	GPU090/ GPU090-28VDC	GPU120/ GPU120-28VDC	GPU180/ GPU180-28VDC
Engine	Cummins QSB4.5L Stage V operating at 2000 RPM @ 173HP		Cummins QSB6.7L Stage V operating at 2000 RPM @ 280HP
	Turbocharged inline 4-cylinder common rail fuel system		Turbocharged inline 6-cylinder common rail fuel system
	Cummins approved and tested application		
Physical	55 Gallon Fuel Tank w/ 8 hr run time at max full load.		77 Gallon Fuel Tank w/ 8 hr run time at max full load.
	80" H (2032mm) x 80" W (2032mm) x 120" L (3048mm)		82" H (2083mm) x 84" W (2134mm) x 168" L (4267mm)
	4000lb (1814kg) GPU090 Dry Weight		7000lb (3175kg) GPU180 Dry Weight
	4500lb (2041kg) GPU090-28VDC Dry Weight		8000lb (3629kg) GPU180-28VDC Dry Weight

ENGINE PROTECTIONS

Low fuel shutoff	Low oil pressure shutoff
High coolant temperature shutoff	Low aresol exhaust fluid (AEF)
Intake air restriction indicator	Low coolant level shutdown

400Hz PERFORMANCE

Rating: 180kVA, 3 phase, 4 wire, 115/200 VAC continuous
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
Low speed and overheat protection

PROTECTIONS

Per 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
Aircraft Cable Interlock (E/F)

ENVIRONMENTAL

Operating temperatures: -25°F to 131°F (-32c - 55c)
Relative humidity 10– 95% noncondensing
No altitude derating required up to 12,000 ft.

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 "traffic white" (RAL 9016). Custom colors are free with a paint chip, swatch or identification number

Tier 3 options may be requested for applications outside of the US not subject to emission standards, applications covered by an active National Security Exemption(NSE) from the Environmental Protection Agency (EPA), or applications subject to NSE approval.

At FCX Systems, we take pride in our highly trained support staff, dedicated to providing the best operational and technical support in the industry. Factory technicians are available for on-site training, maintenance and repair services, either in conjunction with our available maintenance plans, or as standalone services. Operational and maintenance training are also available at our factory. With FCX you can rest assured that you will have the support you need, when you need it, from a friendly, professional and experienced staff, 24/7/365. Contact us at **(304)983-0403** or **service@fcxinc.com**.

INCLUDED OPTIONS

Fuel/water separator	Stainless steel fuel tank
Low fuel shut off	Blue beacon low fuel light
Running lights	Anti-restart ignition
12 VDC Battery System	

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 parking brake	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	

28VDC OPTION

28VDC-600A Active Rectification design. Simultaneous or Either/Or operation. (For dual AC output, second output is locked out during 28V operation)
28VDC LED control panel with output control push buttons
28VDC Performance Per Mil-Std-704F