

SILICON D272 GPU



The Silicon D272 GPU is a three phase mobile aircraft Ground Power Unit, accommodated in a fully towable trailer capable of providing 28V DC 2000 amps for starting purposes and a 200amp continuous clean avionics constant voltage supply. The GPU has a very fast response time to connect the output voltage as the loads vary. The DC voltage is adjustable from 26 to 32 volts DC and the control will maintain this voltage constant for mains variations of 10% mains variation from no load to full load. Instrumentation and controls are mounted on the tailgate and the AC and DC cable and accessories are stowed in the nosecone of the trailer. On board aircraft battery life can be greatly extended by using this GPU.

Maximum Duty Cycle	2000 amps for 5 sec, 550 amps for 5 min, 200 amps continuous.	
Current Limit	Fully adjustable between 1000 and 2000 amps	
Instrumentation	Voltmeter and dual range ammeter 0-200, 0-2000 amps Thermal warning lights	
28 volt DC Power Warning Lamps	Two amber lights are mounted on sides of unit	
3Phase Input Protection	Automatic phase rotation selection of 380/440v 50hz input	
Clean DC output	Less than 1% ripple at 550 amps output	
Voltage Indication	An easily read analog 0-50V DC voltmeter gives the output voltage	
Current Indication	Output current is indicated on a dual range 200Amp 2000Amp ammeter with a change-over switch. The ammeter is protected if starting is carried out with the lower range selected	
Current limit	Current limit of the DC output can be manually set to between 1000Amp and 2000Amp by operating the thumb-wheel switch	
AC and DC cables	The highly flexible input and output cables can be stored in the nosecone of the trailer. The unit comes with 20 meters of AC cable and 10 meters of DC cable, terminated in a NATO-3pin aircraft connector.	
Circuit Protection	Mains power is protected by a three phase 100Amp circuit breaker and the DC circuit can be switched on by a control switch at the rear control panel. This will cause the red SHUT DOWN light to extinguish	
Temperature Control / Protection	A system of temperature control has been built into the design to optimize operation of the unit. If the temperature of the rectifier bridge reaches 63 degrees centigrade, fans will switch on to draw external air through the unit from front to rear to control cooling. In the event of the temperature reaching 80 degrees centigrade, the continuous current available will drop from 200Amp to 150Amp indicated by a red THERMAL 150A LIMIT lamp being illuminated. The unit will still provide limited power for servicing, but will not enable a start to be performed. If the bridge temperature reaches an upper limit, the unit will shut-down. The red SHUTDOWN light will be illuminated until the temperature has decreased to a safe value and then the unit will restart automatically.	
DIMENSIONS	Width = 1600 mm Height = 490 mm Mass = 600kgs	Tow-hitch Mass = 47kgs Length = 2600 mm