



## RPGPU BRIDGE SYSTEMS GPU UNIT & CABLE COIL

### RPGPU 90kVA SOLID STATE 400HZ POWER UNIT & CABLE COIL

Sinepower has been developing and manufacturing 400Hz solid state Frequency Converters for more than a decade now.

Our policy, has always been, to offer the best designed products that are environmentally friendly, simple to use, easy to maintain and exceptionally well manufactured thus meeting our clients requirements as well as complying with all standards and legislation.

Sinepower's GPU units were designed with Power factor correction to guarantee a perfect sinusoidal input current from 25% to 150% load and a low THDi (<1.5%).

Sinepower ensure high quality, efficient and secure electrical power supplies.



# SPECIFICATIONS

**RPGPU**  
90kVA SOLID STATE  
400HZ POWER UNIT  
& CABLE COIL

## INPUT

3 phase 400V/415V AC	± 15%*
45Hz up to 65Hz	
Input current harmonics	<2% @ Full Load

## OUTPUT

3 phase 200V AC -400Hz	± 1%*
Overall Efficiency	90%-95%
Max. Crest Factor	1.4:1

## RECTIFIER

4 Quadrant Operation	
AC Voltage Range	-25% + 10%
Efficiency	%95%-97%
Input Frequency Deviation	10%
Overload Capacity	120% Continuous
Inrush Current	None
Overall current limit	150%

\* Other voltages and frequencies available on request (dimensions may change)

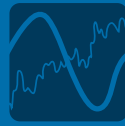
\*\* Other Electronic Overload limits available on request

## INVERTER

Static Regulation 0 - 100% load	± 1%
Dynamic regulation 100%	5%,recovering to 1% within 20ms
Total harmonic distortion	Better than 3% (Linear Load)
Electronic Limit Overload	120%@600s; 150%@60s; 200%@5s**
Overload Capacity (IGBTs)	150% Continuous
Frequency stability	±0.01% Crystal Controlled
Load power factor	0-1
Efficiency	95%-98%
Short circuit proof by electric current limiting and shutdown	

## ENVIRONMENTAL CONDITIONS

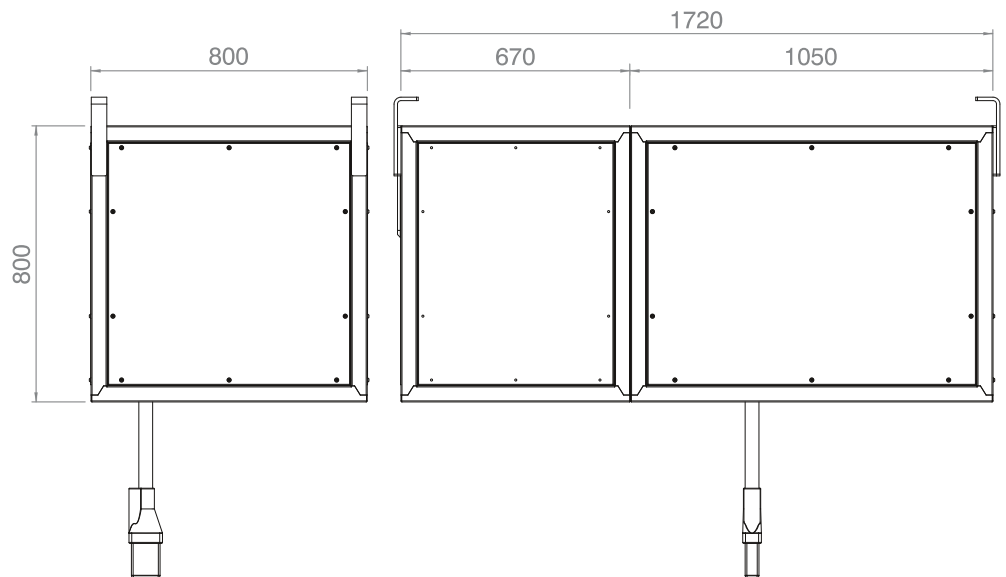
Temperature range	
Sea Level	-40°C to +50 °C(@100% Load)
Above 2000m	30 °C (@100% Load)
Relative Humidity	0%-90% without condensation
Noise Level	<65 dBA@1 meter
Altitude	up to 2500 m without de-rating



## TECHNICAL DRAWINGS

### CABLE COIL

Main input power from GPU to aircraft	90 kVA
Max. output current	260A
Input power for cable drum to work	50/60Hz 400/220V
Input current not more than	16A
Cable winding speed	37.5 m/min
Cable unwinding speed	37.5 m/min
Cable length	24m***
Power of the reactor motor	0.55kW
Degree of protection	IP55
Environmental conditions, temperature value	Standard -20 to +40 C°
Control	Remote control/ directly from aircraft connector
Dimensions LxWxH	1050x800x800mm
Weight	250Kg



\*\*\* Other lengths are available on request (dimensions may change)



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