

Rack Mountable System Amplifier

Product Name : RCA00201U57

Doc. Name : Preliminary Short Spec.

Preliminary Short Specification for RCA00201U57

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Created	Printed	Document Number	Revision	Manufacturer
2010/5/19	2010/10/1		A	<i>RFcore co.,Ltd</i>
File : RCA00201U57 Short Spec.docx				

The Specifications is subject to change before finalization

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ELECTRICAL SPECIFICATIONS

Parameter	Specification	Remark
Frequency Range	20 ~ 100 MHz	
Saturated Output Power	Typical : 500Watts, Minimum : 400Watts	Tcase = 35 °C
Power Output @ 1dB Comp.	TBD Watts min	
Input Power for Rated Output	0 dBm max	
Maximum Input Power for Survival	Pin_max = H dBm, H = (Gain adjustment attenuation value) dBm, H cannot exceed 10 Ex) 0 dBm @ 0 dB attenuation 5 dBm @ 5 dB attenuation 10 dBm @ 10 dB attenuation 10 dBm @ 15 dB attenuation	In case exceeding this limit amplifier back off gain automatically by about 15dB
Small Signal Gain	57 dB max	@ 0 dB attenuation
Small Signal Gain Flatness	± 2.5 dB max	
Input VSWR	2 : 1 max	
Maximum Load VSWR for 0.5 dB degradation	2 : 1	
Maximum Load VSWR for amplifier working	4.5 : 1	
Maximum Load VSWR for amplifier survival	Infinite	In case over 4.5:1, amplifier back off gain by about 15 dB.
Harmonics	-13 dBc min @ TBD Watts	
Spurious Signal	-60 dBc max @ TBD Watts	
Primary Supply Voltage	176 ~ 264VAC / 47 ~ 63 Hz	
Power Consumption	2500 Watts max [TBD]	
RF Input Signal Format	CW / FM	
Input / Output Impedance	50 Ohms nominal	

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ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Ambient Temperature	-20 ~ 55 °C	
Storage Temperature	-30 ~ 75 °C	
Relative Humidity w/o Condensing	MIL – STD – 810F 507.4	
Altitude	Up to 3000 m above sea level	
Vibration	MIL – STD – 810F 514.5	
Shock	MIL – STD – 810F 516.5	
EMI / EMC	MIL – STD – 461E	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	19 x 8.75 x 22 Inch max	
Weight	Less than 50 kg [TBD]	
RF Input / Output Connector	N – Female	
RS – 232 / JTAG Connector	D – Sub 9 Pin Male	
Ethernet Connector	RJ – 45	
Power Connector	Amphenol MIL – C – 5015 Connector	
Cooling	Built – In Forced – Air System	

SELF PROTECTIONS

Parameter	Specification	Remark
Input Overdrive	Pin_max = H dBm, H = (Gain adjustment attenuation value) dBm, H cannot exceed 10 Ex) 0 dBm @ 0 dB attenuation 5 dBm @ 5 dB attenuation 10 dBm @ 10 dB attenuation 10 dBm @ 15 dB attenuation	In case exceeding this limit amplifier back off gain automatically by about 15dB, Factory Reset
Over Temp Alarm	85 °C ± 5 °C shutdown	Factory Reset
VSWR Alarm	Load VSWR over 4.5 : 1	Factory Reset

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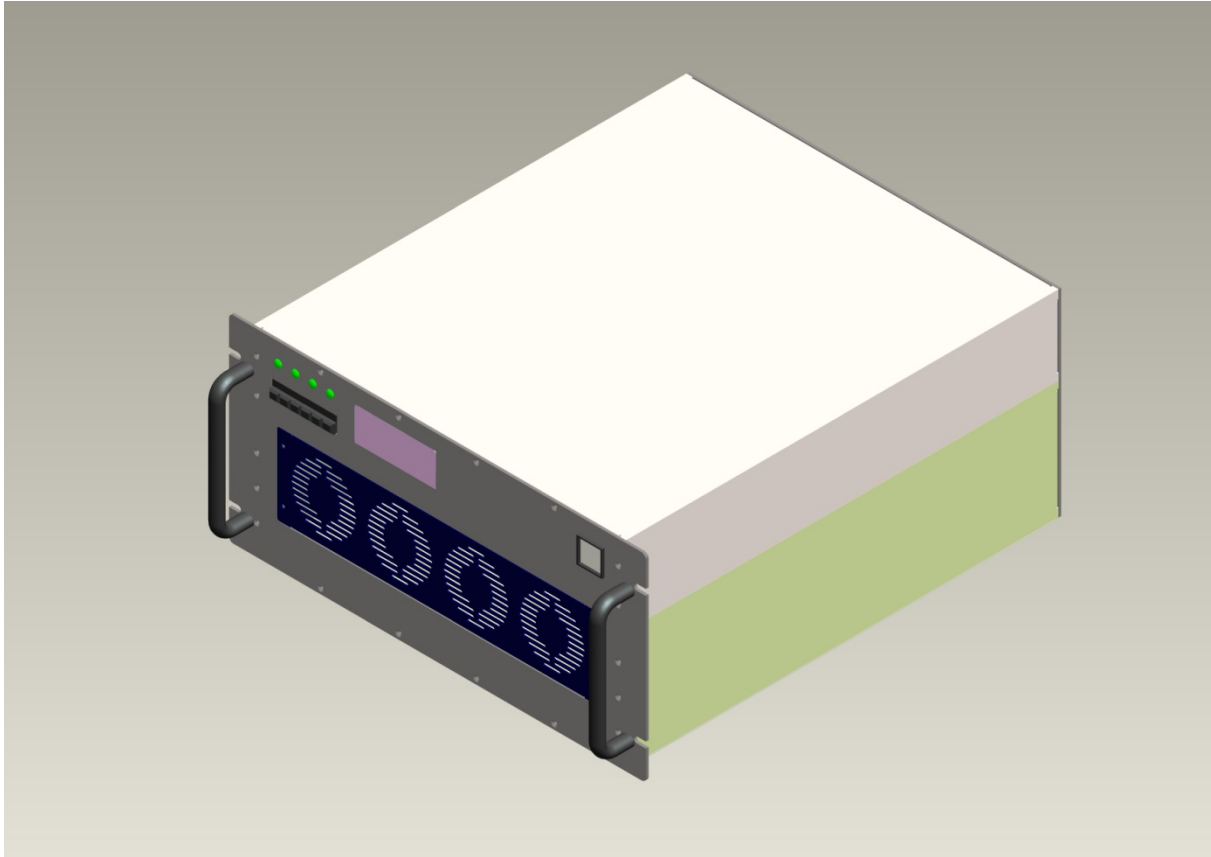
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Design Concept of Outline Drawing



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