

# Rack Mountable System Amplifier

Product Name : RCA0105U55

Doc. Name : General Spec.

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<p style="text-align: center;"><b>General Specification</b> for <b>RCA0105U55</b></p>
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1

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Created	Printed	Document Number	Revision	Manufacturer
2009/9/21	2010/10/1		A	<i>RFcore co.,Ltd</i>
File : RCA0105U55 General Spec.docx				

*The Specifications is subject to change before finalization*

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<http://www.rfcore.com>

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## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Remark
Frequency Range	100 ~ 500 MHz	
Saturated Output Power	Typical: 300 Watts, Minimum: 250 Watts	
Power Output @ 1dB Comp.	150 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	54 dB min	@ 0 dB attenuation
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	3.5 : 1	
Maximum Load VSWR for amplifier survival	Infinite	In case over 3.5:1, amplifier back off gain by about 15 dB.
Harmonics	-15 dBc min @ 150 Watts	
Spurious Signal	-60 dBc max @ 150 Watts	
Primary Supply Voltage	18 ~ 35 VDC	
Power Consumption	1000 Watts max	
RF Input Signal Format	CW / FM	
Input / Output Impedance	50 Ohms nominal	

2

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## ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Ambient Temperature	0 ~ 50 °C	
Storage Temperature	-40 ~ 85 °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	

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	19" x 5.25" x 20"	
Weight	Less than 20 Kg	
RF Input / Output Connector	N – Female	
DC Input Connector	ADG02A 20-19P	Box mount receptacle
RS – 232 / JTAG Connector	D – Sub 9 Pin Male	
Ethernet Connector	RJ – 45	
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 Power Alarm	58 dBm ± 0.5 dB shutdown	Factory Reset
Over Temp Alarm	85 °C ± 5 °C shutdown	Factory Reset
VSWR Alarm	Load VSWR over 3.5 : 1	Factory Reset

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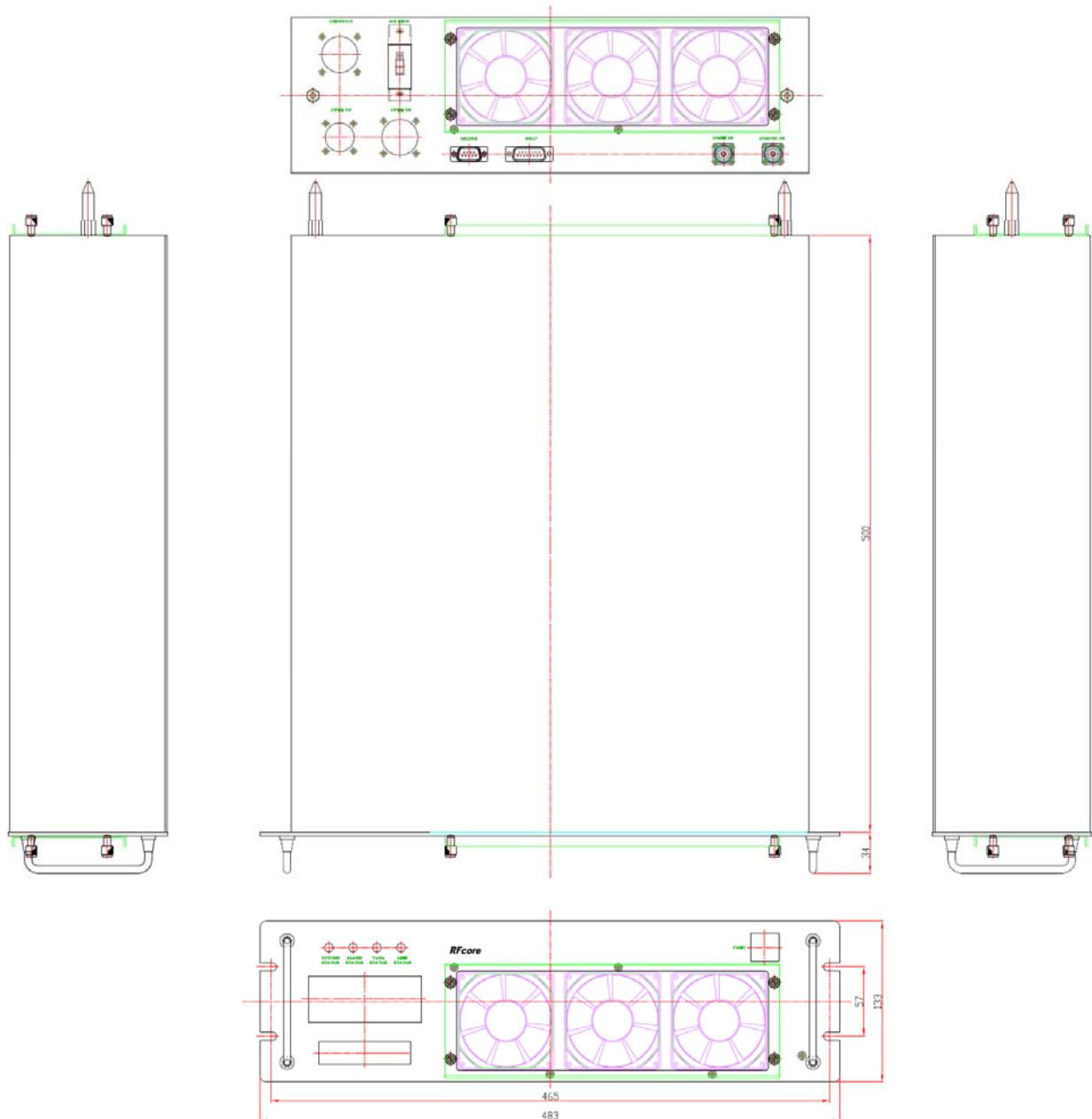
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## MECHANICAL DRAWING



4

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