

# RFA901-B-x

## RF Amplifier



1208

The RFA901-B series are a range of air-cooled power amplifiers suitable for driving Isomet acousto-optic modulators and deflectors. The frequency input is compatible with the *ISOMET* iDDS-1-SE high speed, direct digital frequency synthesiser. This amplifier features both digital gate and analog modulation inputs for the control of the RF amplitude. Protection includes an internal over temperature sensor and a 'TranZorb' over voltage diode on the DC supply input. An external interlock (or RF enable) input is provided.

The RFA901-B will operate from a +24Vdc to +28Vdc supply. LED's indicate the status of the thermal interlocks, DC supply and RF power. The maximum RF output power is adjusted by means of a pre-set potentiometer.

This standard amplifier requires forced air-cooling. An optional fan and cover assembly or a water cooled top plate can be provided. Please specify options at order.

		<u>Freq'</u> <u>Identifier</u>			<u>Option</u>
RFA901	-	<b>B</b>	-	<b>X</b>	
30 - 50MHz		<b>0</b>			
40 - 60MHz		<b>1</b>		<b>F</b>	Fan
60-100MHz		<b>2</b>		<b>W</b>	Water Cooled

### SPECIFICATION

Power Output	:	> 12 Watts Max CW
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
1.5dB Bandwidth (-B)	:	see table
Input Signal (SMA)	:	3dBm nominal
Input Impedance	:	50Ω nominal
Modulation Control Voltage		
Digital	:	TTL compatible (> 2.7V, RF O/P=on)
Analog	:	0.0 to 10.0V *, 1Kohm i/p impedance (nominal)
RF ON to OFF Ratio	:	40dB below full power
Output Switching Speed	:	< 0.1μs Rise /Fall time, 0 to 10 Watts
Interlock	:	Open OFF, closed ON
	:	Sink 20mA at 24V
Power Supply	:	+24V to +28Vdc, 0.25% regulation, < 2A (+15Vdc available on certain models)
Temperature Range	:	0° to 60°C, Thermal Shutdown Interlock

[\* Other options available 0-1V, 0-5V]

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

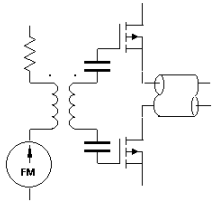
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Quality Assured.

In-house: RF & Digital design  
Software Development  
OEM manufacture



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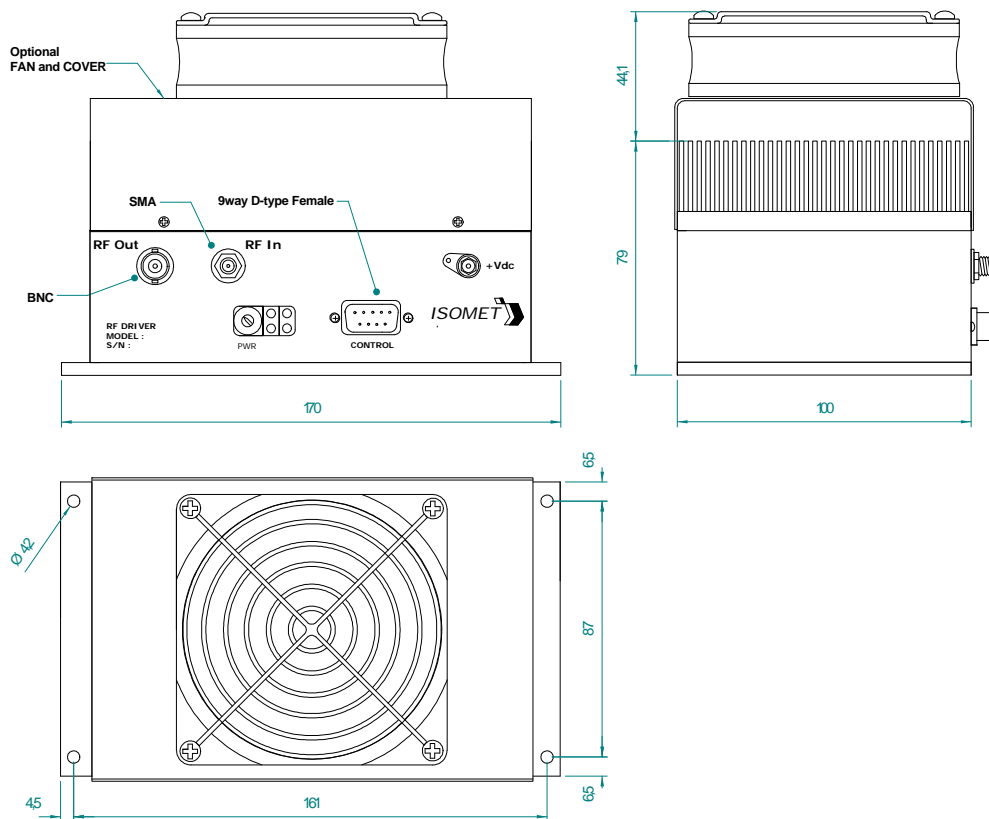
## RF Amplifier



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RF Output	:	BNC
RF Input	:	SMA
Control signals -	:	9 pin 'D' type
Amplitude Control, Digital	:	+sig pn6, -rtn pn7
Amplitude Control, Analog	:	+sig pn8, -rtn pn9
Interlock enable (connect to AO)	:	+sig pn4, -rtn pn5 (closed = on)
Interlock monitor, TTL compatible	:	+sig pn1, -rtn pn2 (+5V = OK, 0V = fault)
Power Input	:	Feed through filter solder tag

### OUTLINE DRAWING



Model RFA901-2-F shown

Dimensions: mm

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**Quality Assured.**  
 In-house: RF & Digital design  
 Software Development  
 OEM manufacture