

# RFA920-FC-x

## RF Driver / Amplifier



1208

The RFA920-FC is a combined oscillator and 20W power amplifier suitable for driving Isomet acousto-optic modulators and Q-switches. This driver 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 RFA920-FC will operate from a +24V 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>Option</u>	
RFA920 -	<b>FC</b>	<b>X</b>	
24.0MHz	<b>24</b>	<b>F</b>	Fan fitted
27.12MHz	<b>27</b>	<b>W</b>	Water Cooled
40.68MHz	<b>40</b>	<b>B</b>	BNC Connector
80.0MHz	<b>80</b>		
110.0MHz	<b>110</b>		

### SPECIFICATION

Power Output	:	> 25 Watts Max CW (28V supply) > 20 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	The Driver will not oscillate
Centre Frequency, FC	:	see table
Frequency stability	:	± 0.003%
Frequency accuracy	:	± 0.005%
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 28V
Power Supply	:	+24V to +28Vdc, 0.25% regulation, < 2.5A
Temperature Range	:	0° to 60°C, Thermal Shutdown Interlock
R.F. Output	:	SMA (or BNC if specified)

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

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

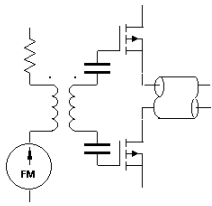
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Quality Assured.

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



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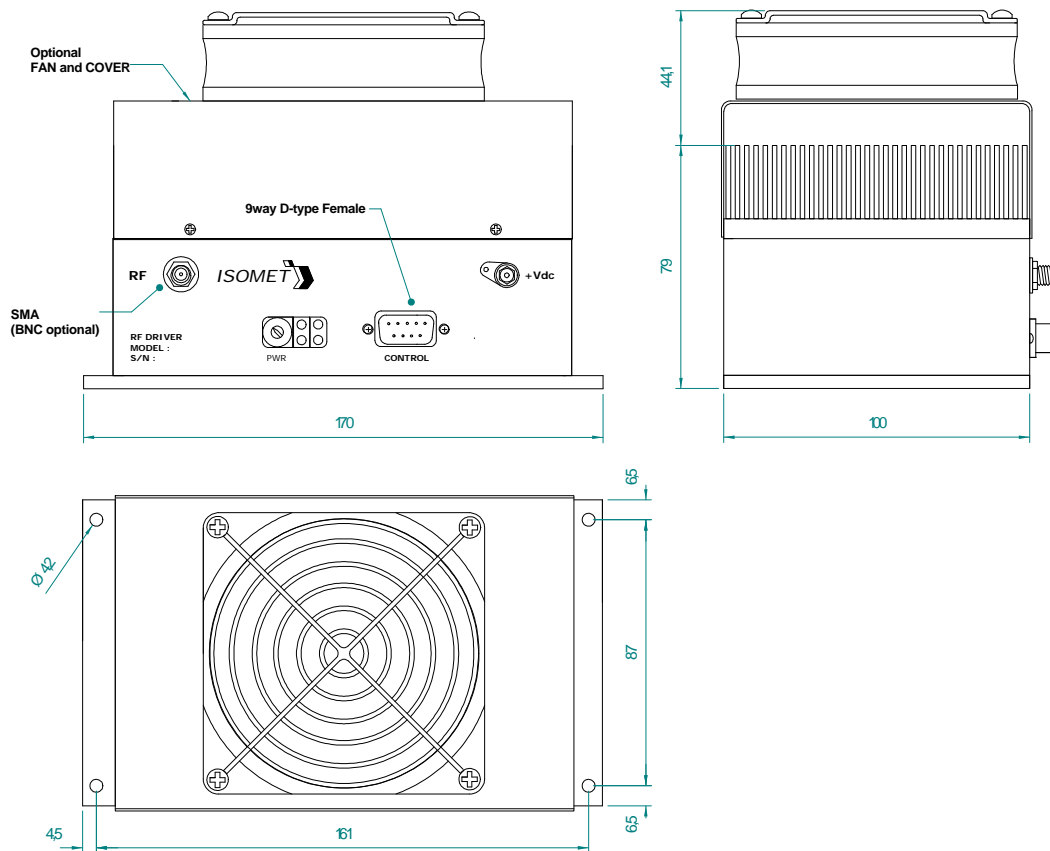
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Control signals -	:	9 pin 'D' type
Amplitude Control, Digital	:	+sig pn6, -rtn pn7
Amplitude Control, Analog	:	+sig pn8, -rtn pn9
Interlock enable (connect to AO)	:	+sig pn4, -rtn pn5 (closed = on)
Interlock monitor, TTL compatible	:	+sig pn1, -rtn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

### OUTLINE DRAWING



Model RFA920-40-F shown

Dimensions: mm

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