



RFA3080-1-25

Tuneable RF Driver



5021

The Model RFA3080-1-25 Deflector Driver is a class A solid-state RF source designed to drive *ISOMET* Acousto-Optic Scanners with up to 50.0 Watts total power across a frequency band of 65 to 95 MHz.

The driver controls include a 0 to +10 volt frequency tuning input and a 0 to +10 volt amplitude modulation input. Maximum gain is externally adjustable via a pre-set potentiometer. The start frequency is also adjustable and is set by the frequency offset potentiometer (FOS). The base plate is water cooled.

SPECIFICATIONS

Oscillator Type:	Varactor-tuned thin film hybrid
Power Out:	25 Watts Maximum CW into 50Ω
Load VSWR:	< 2.5:1 for best results
Output RF Power Variation vs.Freq:	≤ 1 dB
Spurious Outputs:	Harmonics > 20dB below fundamental
Tuning Range:	60-100MHz max, 65-95MHz typical
Tuning Voltage (Vt):	0 to 10V for specified tuning range
Tuning Linearity:	< +/- 1.5% over specified tuning range
Tuning Voltage Impedance:	1Kohm (nominal)
Tuning Slew Rate	> 10 MHz/μs
Residual FM:	< 10 KHz peak-to-peak
Frequency Stability:	±0.25%
Modulation Input	
Analogue:	0-10V for 100% depth of modulation, DC coupled
Input Impedance:	600 ohm (nominal)
RF ON-OFF Ratio:	> 37 dB
RF Amplitude rise/fall time	< 100nsec
DC Power Input:	+24Vdc* at < 7A regulated to ± 0.25%
Temperature Range:	0°C to 60°C ambient. Temperature at mounting face must not exceed 70°C. Water cooling heatsink.

* A +28Vdc positive supply can be used giving a higher maximum RF power

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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Quality Assured.

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



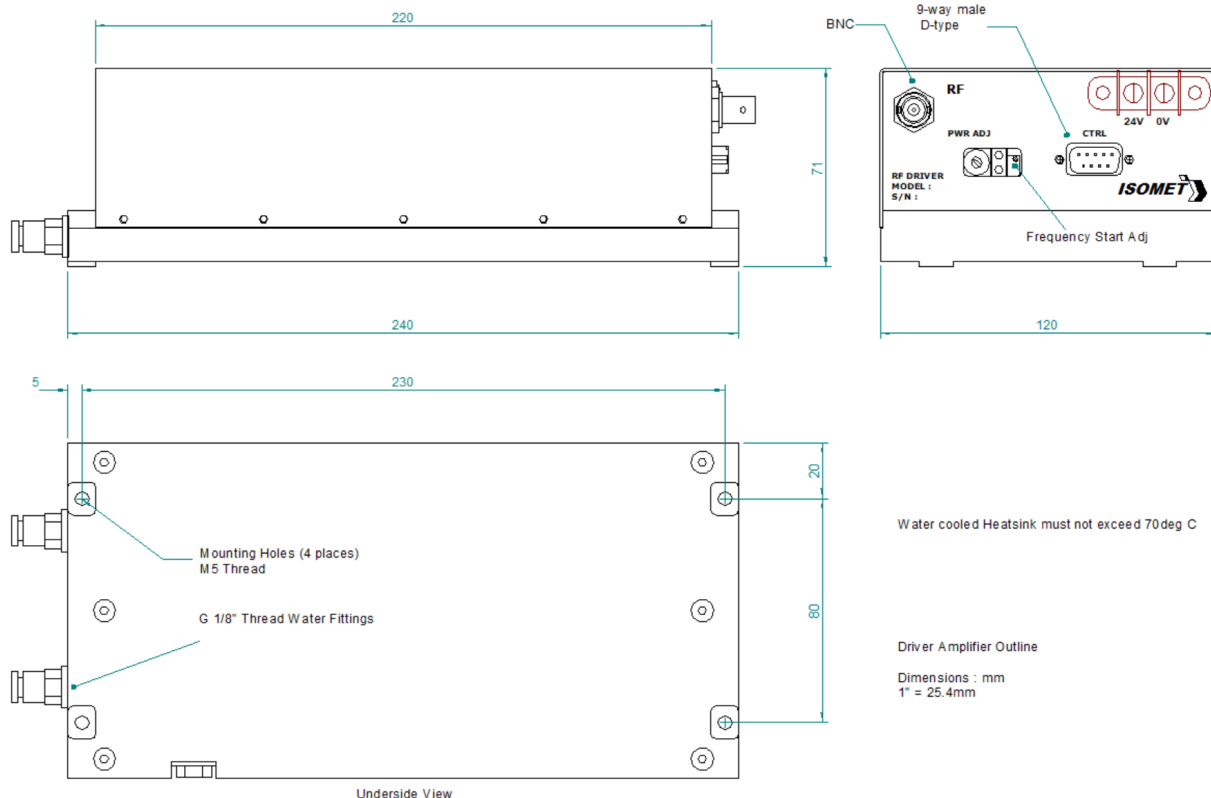
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OUTLINE DRAWING



Control signals	-	:	9 pin 'D' type
Tuning Voltage		:	+sig pn1, -rtn pn6
Amplitude Control		:	+sig pn8, -rtn pn3
Interlock Control (Contact / Low = On)		:	+sig pn9, -rtn pn4
Digital Gate (NC or High = On)		:	+sig pn7, -sig pn2

Options -x, multiple combinations possible:

- BR : Brass water cooled heatsink (water fittings on RF output face)

Refer application note AN1906 regarding Coolant Specification

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