

RFA3100-2-2

Tuneable RF Driver

(Phase Delayed - Dual Output)



0321

The Model RFA3100-2-2 is a dual output class A solid-state RF driver designed for *ISOMET* beam steered Acousto-Optic Scanners with up to 3.6 Watts total power across a frequency band of 70 to 130MHz.

The driver controls include a 0V to +10volt frequency tuning input and a 0V to +10volt 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). An internal delay line introduces the correct phasing between the RF outputs, specific to the AO deflector. A low power frequency monitor output is also provided and can be used for monitoring or feedback purposes.

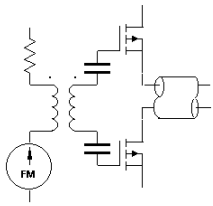
SPECIFICATIONS

Oscillator Type:	Varactor-tuned thin film hybrid
Power Out, Each Output (X1,X2 (DLY)):	1.8 Watts Maximum CW into 50Ω
Phase delay between outputs:	AO Deflector dependant
Load VSWR:	< 2.5:1 for best results
Frequency monitor output (Fmon):	~300mVp-p, 50ohm
Output RF Power Variation vs. Freq:	≤ 1 dB
Spurious Outputs:	Harmonics > 20dB below fundamental
Tuning Range:	75-125MHz or 80-130MHz
Tuning Voltage (Vt):	0 to 10V for specified tuning range
Tuning Linearity:	< +/- 2% over specified tuning range
Tuning Voltage Impedance:	1Kohm (nominal)
Tuning Slew Rate	> 6 MHz/μs
Residual FM:	< 10 KHz peak-to-peak
Frequency Stability:	±0.25%
Modulation Input	
Analogue:	0-10V for 100% depth of modulation
Input Impedance:	600 ohm (nominal)
RF ON-OFF Ratio:	> 37 dB
RF Amplitude rise/fall time	< 10nsec
DC Power Input:	+24/+28Vdc* at 1.0A regulated to ± 0.25%
Temperature Range:	0°C to 60°C ambient. Temperature at mounting face must not exceed 70°C
Mounting Orientation:	Any

* Maximum RF power 1.6W/output with +24Vdc positive supply

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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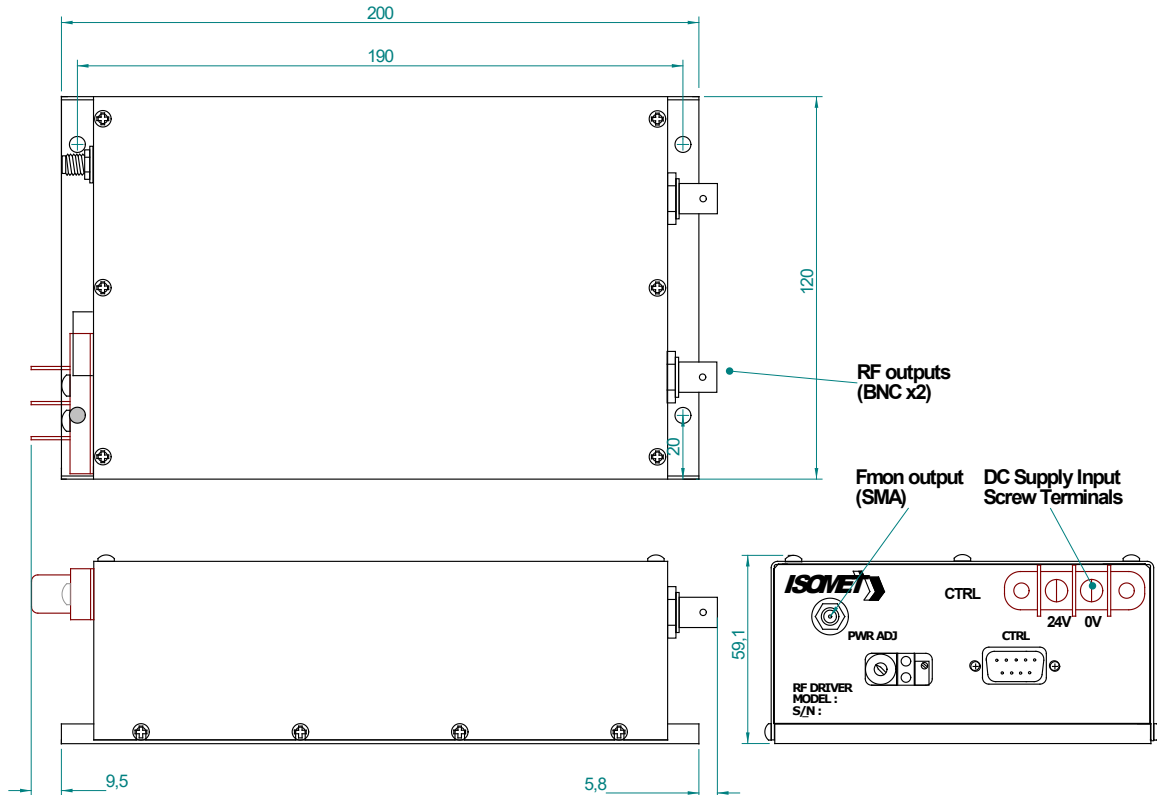
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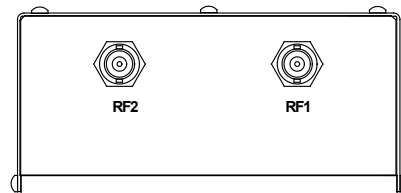


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OUTLINE DRAWING



- 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



Secure to heatsinking surface

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 Software Development
 OEM manufacture