

## RFA0120-2x4-6

### Quad RF Amplifier (Preliminary)



0417

The RFA0120-2x4-6 contains 2 pairs of class-A solid-state RF amplifiers and is designed to operate with *ISOMET* quad-output frequency synthesizers for X-Y AO deflector applications. Each output will deliver in excess of 6 Watts power across a frequency bandwidth of 95 to 145 MHz

Each pair of amplifier channels requires 0dBm (1mW) RF input at the desired output frequency. There is no gain adjustment. The RF power, amplitude modulation and phase are determined by the input source.

The design includes over temperature and high reflected power protection.

#### SPECIFICATIONS

Power Out, each output:	6 Watts minimum CW into 50Ω
Load VSWR:	< 2.5:1 for best results
Output RF power variation vs. freq':	≤ 1 dB over specified bandwidth
Spurious output:	Harmonics > 20dB below fundamental
Bandwidth	95-145MHz minimum
RF input:	3dBm max
Gain:	> 40dB
Input impedance:	50 ohm (nominal)
RF amplitude rise/fall time	< 50nsec typical (input dependent)
DC power input:	+24V to 28Vdc* at <3A regulated to ± 0.25%
Temperature range:	0°C to 50°C ambient temperature. Integrated water cooled heatsink. Mounting face must not exceed 70°C.

\* +28Vdc supply will give increased maximum RF power

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

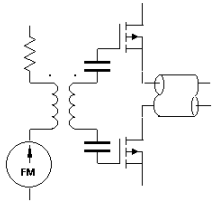
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In-house: RF & Digital design  
Software Development  
OEM manufacture



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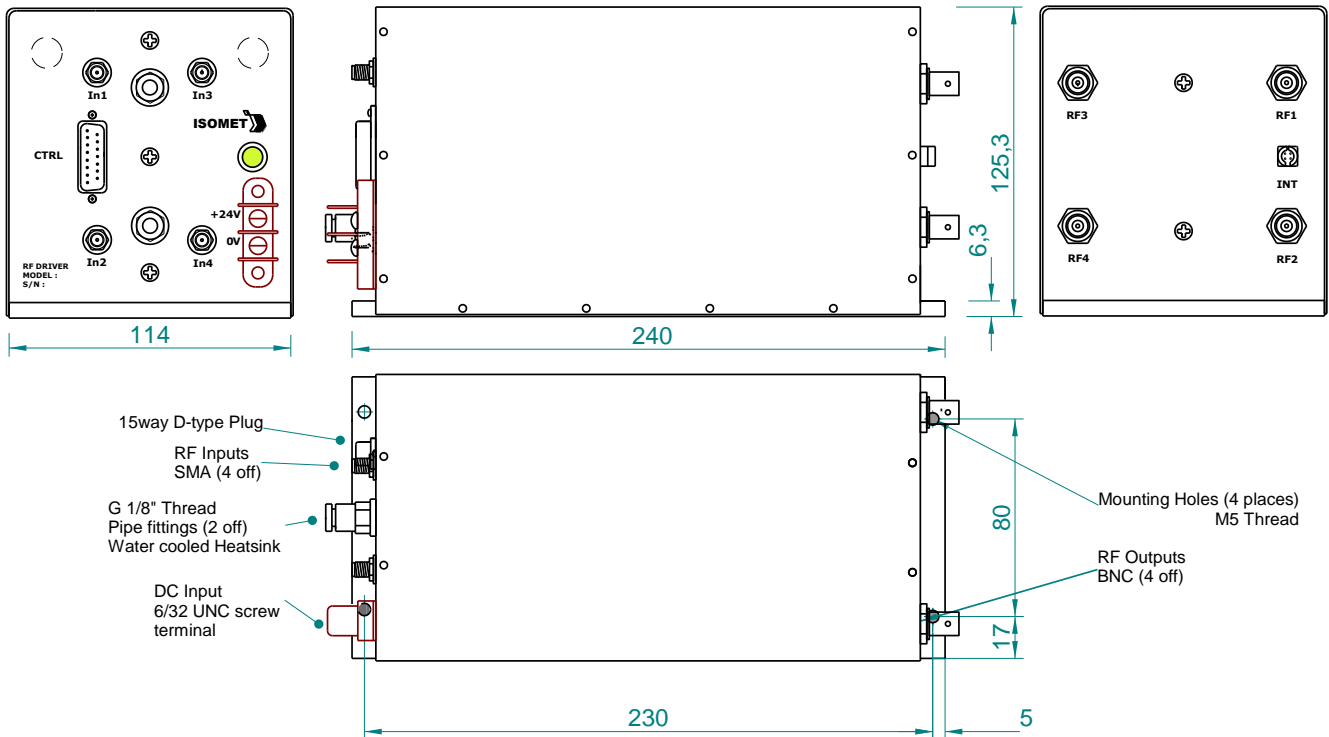
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### OUTLINE DRAWING

Dim'n mm



(Note: Four RF inputs shown in diagram above. Only 2 fitted on this model)

Control signal on 15 pin 'D' type: Digital Gate (NC or High = On)

Refer application note AN1206 regarding coolant specification

Options -x, multiple combinations possible:

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

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Quality Assured.

In-house: RF & Digital design  
Software Development  
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