

RFA0180-4-3(BR)

Quad RF Amplifier

(Preliminary)



1121

The RFA0180-4-3 contains four independent class-A solid-state RF amplifiers and is designed to operate with *ISOMET* quad-output frequency synthesizers. Each output will deliver up to 3 Watts power across a frequency bandwidth of 125 to 225 MHz

Each amplifier channel 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 protection.

SPECIFICATIONS

Power Out, each output:	3 Watts 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	125-225MHz minimum
RF input:	3dBm max
Gain:	> 35dB
Input impedance:	50 ohm (nominal)
RF amplitude rise/fall time	< 50/50nsec typical (input dependent)
DC power input:	+24V to 28Vdc* at <3.5A regulated to ± 0.25%
Temperature Range:	0°C to 60°C ambient
Cooling:	Water cooled. All wet surfaces Brass.
Mounting Orientation:	Any

Options –x, multiple combinations possible:

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

Refer application note AN1906 regarding coolant specification

* +28Vdc positive supply can be used giving increased maximum RF power

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
 Tel: (703) 321 8301 Fax: (703) 321 8546
 E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

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



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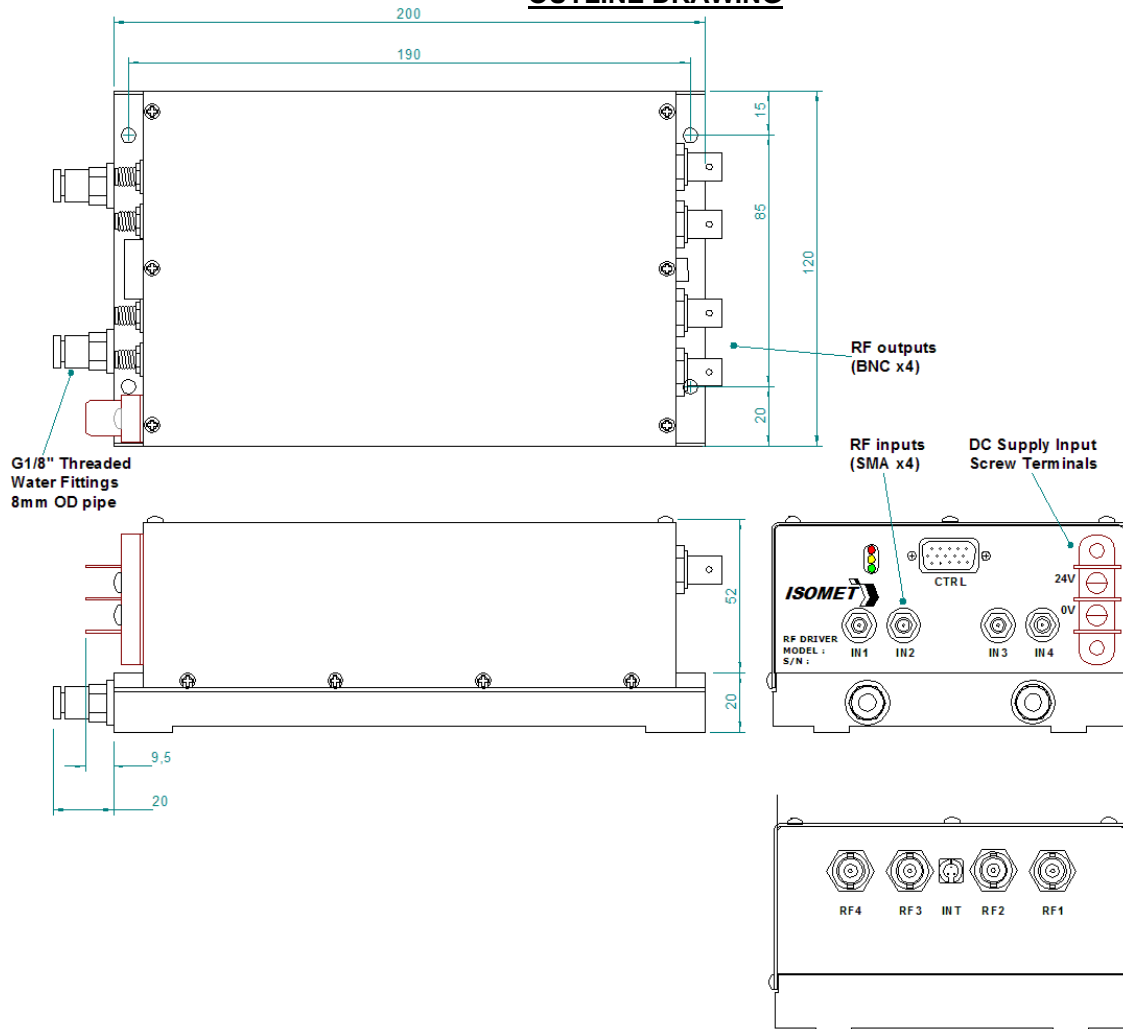
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OUTLINE DRAWING



Control signals on 15 pin high density 'D' type (compatible with IMS4-L(P) J5 output) :

pin	signal	pin	signal	pin	signal
1	+5V OUT	6	reserved	11	reserved
2	reserved	7	0V out	12	Interlock Monitor OUT
3	reserved	8	reserved	13	reserved
4	0V OUT	9	Amplifier Enable (-Gate) IN	14	reserved
5	reserved	10	+5V out	15	reserved

DO NOT connect to reserved pins

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