

RFA0170-2-10

RF Amplifier



1921

The RFA0170-2-10 contains a pair of class-A solid-state RF amplifier and is designed to operate with *ISOMET* multi-output frequency synthesizers. Each output will deliver up to 12 Watts power across a frequency band from 130 to 210MHz.

Each amplifier channel requires up to 0dBm (1mW) RF input at the desired output frequency. There is no gain adjustment. The RF power and amplitude modulation are determined by the input source. The design includes over temperature and high reflected power protection.

SPECIFICATIONS

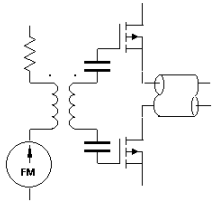
Power Out, <u>each output</u> :	12 Watts CW into 50Ω
Load VSWR:	< 2.5:1 for best results
Output RF power variation vs. freq':	≤ 1 dB over specified bandwidth
Spurious output:	Harmonics > 20dB below fundamental
3dB bandwidth:	130 – 210MHz, minimum.
RF input:	3dBm max, 0dBm typical
Gain:	> 40dB
Input impedance:	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 60°C ambient temperature. Integrated water cooled heatsink. Mounting face must not exceed 70°C.

Refer application note AN1906 regarding coolant specification

* +28Vdc supply will give increased 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



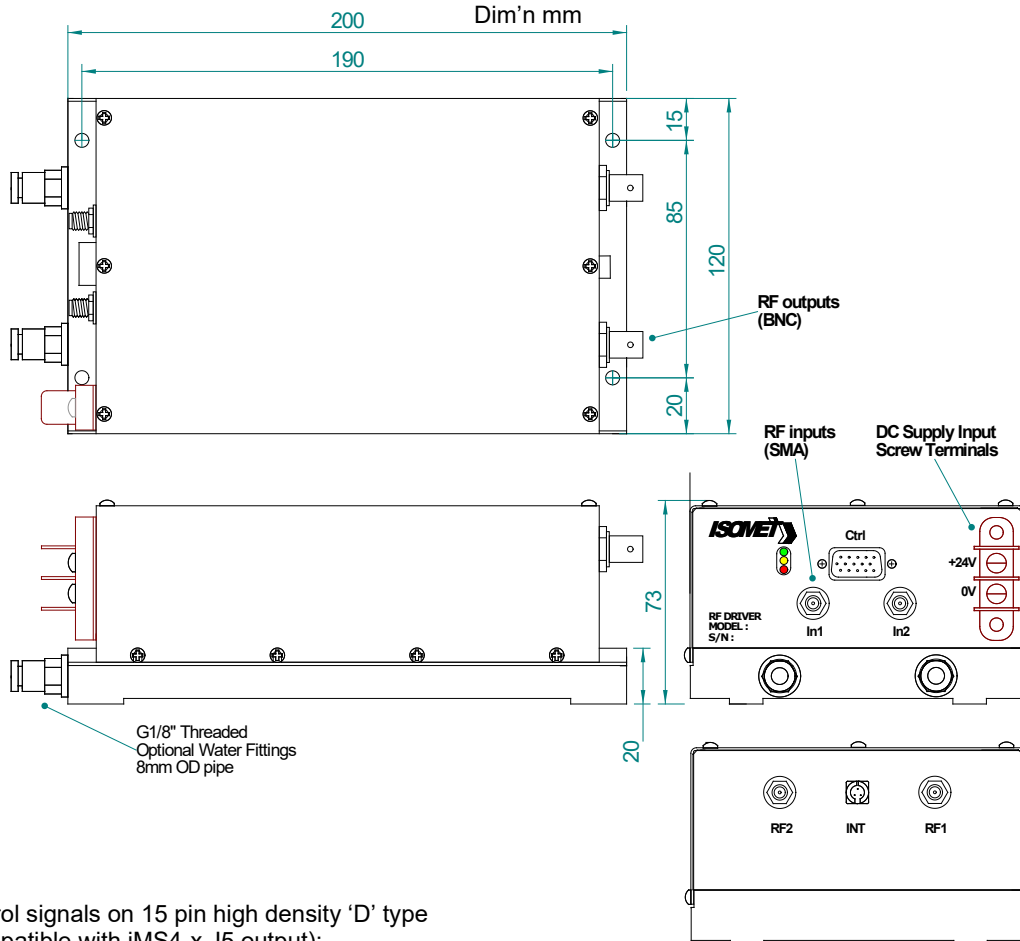
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OUTLINE DRAWING



Control signals on 15 pin high density 'D' type
(Compatible with iMS4-x J5 output):

pin	signal	pin	signal	pin	signal
1	+5V OUT	6	reserved	11	reserved
2	reserved	7	0V	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

Options -x:

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

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 Software Development
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