

# RFA0120-2-15

## RF Amplifier



0718

The RFA0120-2 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 15.0 Watts power across a frequency bandwidth of 100 to 140 MHz

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.

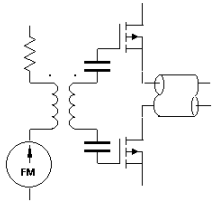
### SPECIFICATIONS

Power Out, <u>each output</u> :	15 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
Frequency Range:	100 – 140 MHz, 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.

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

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



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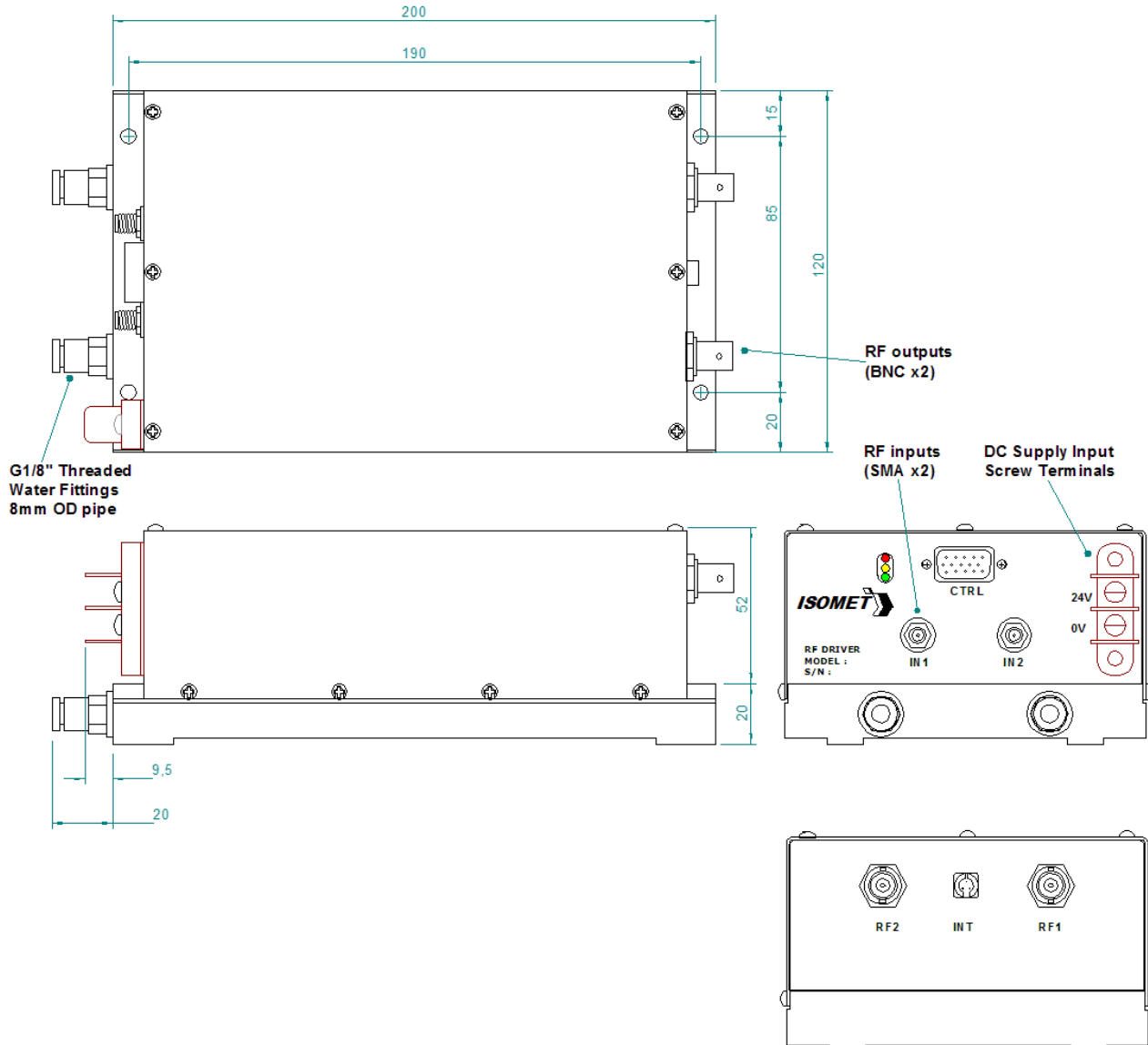
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### OUTLINE DRAWING

Dim'n mm



Refer application note AN1606 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  
 OEM manufacture