

RFA200

RF Amplifier

(Power amplifier compatible with the iDDS-1SE)



1106

The Model RFA200 water-cooled amplifier is a Class-A solid-state unit designed to drive the *ISOMET* high power Acousto-Optic modulators and deflectors with up to 70 Watts total power in the 35 to 65 MHz frequency band. The amplifier RF input is compatible with the *ISOMET* iDDS-1 series high speed, direct digital frequency synthesiser. The amplifier also features digital and analog inputs for the control of the RF amplitude. Protection includes an internal over temperature sensor, and a 'TranZorb' over voltage diode on the DC supply input. An external interlock (or RF enable) input is provided for connection to the AO device thermal interlock.

The RFA200 will operate from a +24V to +28Vdc supply. LED's indicate the status of the thermal interlocks, DC supply and RF power. The maximum RF output power is adjusted by means of a pre-set potentiometer.

The amplifier includes an integral water cooled base. The unit can be supplied with the coolant fittings located at the front (RFA200) or rear (RFA200-R). Please specify at time of order.

SPECIFICATIONS

Power Out (BNC):	>65Watts CW into 50Ω *
Optimized Frequency Response:	30-50 MHz (40-60MHz on request)
Flatness:	± 0.5dB
Gain to Each Output:	50dB nominal
Input Signal (SMA):	3dBm nominal
Input Impedance:	50Ω nominal
Output Impedance:	50Ω nominal
Input VSWR:	<2.0:1
Harmonic Distortion:	>25dB below fundamental
RF Rise/fall time:	<250ns
Power Supply Requirement (DC):	<7A at +24V (or +28V) *
Power Input:	Feed through filter solder tag
Dimensions:	(See reverse)
Maximum Allowable Case Temperature:	60°C
Minimum Allowable Case Temperature:	0°C

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

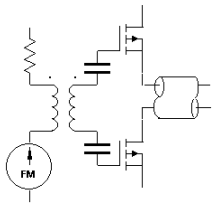
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Quality Assured.

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



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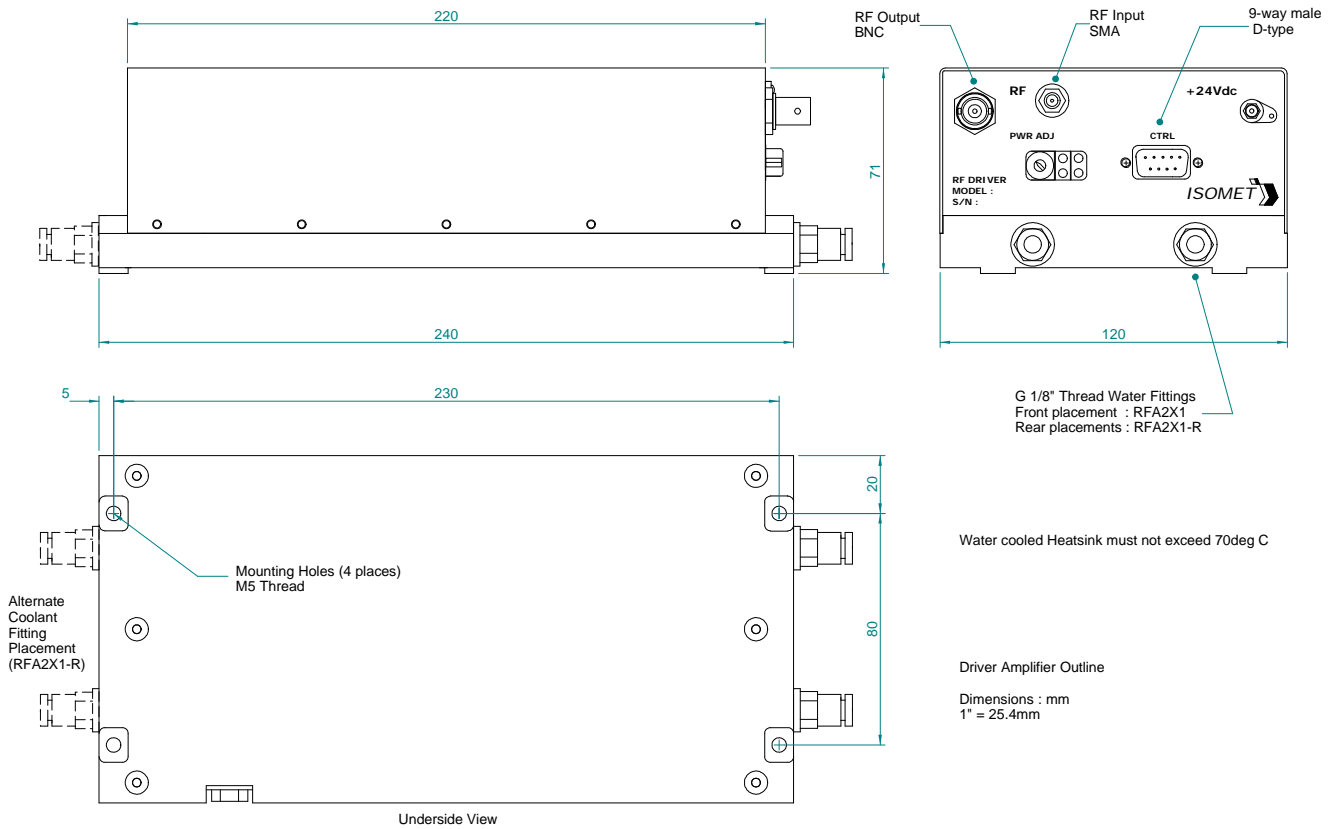
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Control signals -	:	9 pin 'D' type
Amplitude Control, Digital	:	+sig pn6, -rtn pn7
Amplitude Control, Analog	:	+sig pn8, -rtn pn9
Interlock enable (connect to AO)	:	+sig pn4, -rtn pn5 (closed = on)
Interlock monitor, TTL compatible	:	+sig pn1, -rtn pn2 (+5V = OK, 0V = fault)

OUTLINE DRAWING



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Software Development
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