

iMSL-RFA1170-4



Programmable Synthesizer with Quad Output Power Amplifier

(Preliminary data)

1221

This AO deflector driver unit integrates the Isomet iMS4-L programmable synthesizer with our RFA1170/4 class AB power amplifier, and is specifically designed for the LS700- type high power Germanium deflectors.

The iMSL enables 'on-the-fly' phase and amplitude compensation to be applied to each of the RF outputs depending on the programmed frequency. . Phase shifting is the basis of the acoustic beam-steering technique used in Isomet wideband AO deflectors. The result is a highly uniform and rapid laser beam scanning at relatively low average RF drive powers.

The iMSL-RFA1170-4 also offers additional features to aid diagnostics and control. These include monitoring of the load VSWR, DC current and temperature.

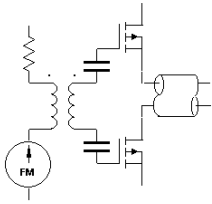
(Please refer to the iMS4-L for further details)

SPECIFICATIONS

Power out max:	90 Watts max. CW into 50 Ω per output
Power out typical:	70 Watts max. CW into 50 Ω per output
Frequency response:	45 - 95 MHz
Flatness:	+/- 1dB
Gain Input to Each Output:	50dB nominal
Input / Output impedance:	50 Ω Nominal
2 nd Harmonic Distortion:	> 20 dB below fundamental at 60W output
3 rd Harmonic Distortion:	> 15 dB below fundamental at 60W output
RF rise/fall time	< 20nsec for 0 – 50W
RF gate	Software controlled
Thermal interlocks	Compatible with LS700 series
Driver Enable Input (SMA)	Voltage free contact required Open = Off, Closed =ON
Power Supply Requirement:	28A (total) at +24Vdc
Water Cooling:	Maintain water flow at > 1litre/min / <25°C (Corrosion inhibitor recommended see AN1906)

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue 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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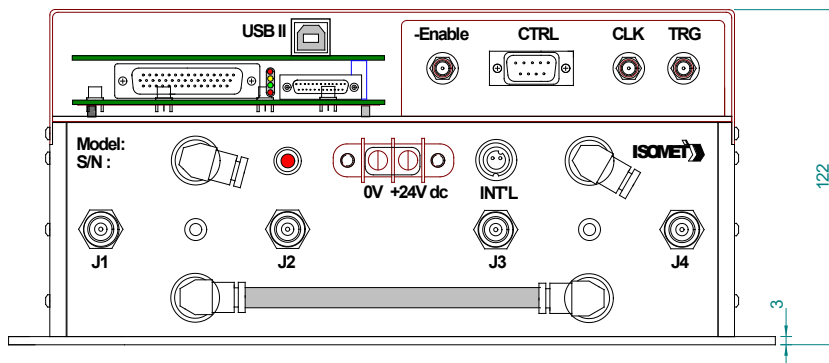
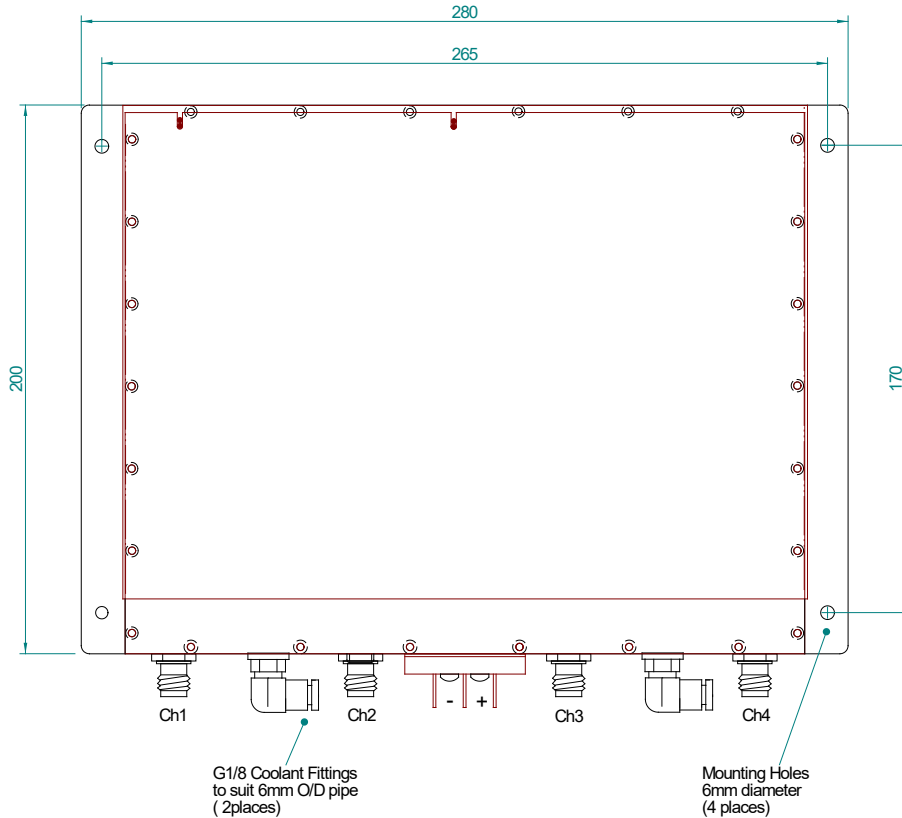


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OUTLINE DRAWING



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