

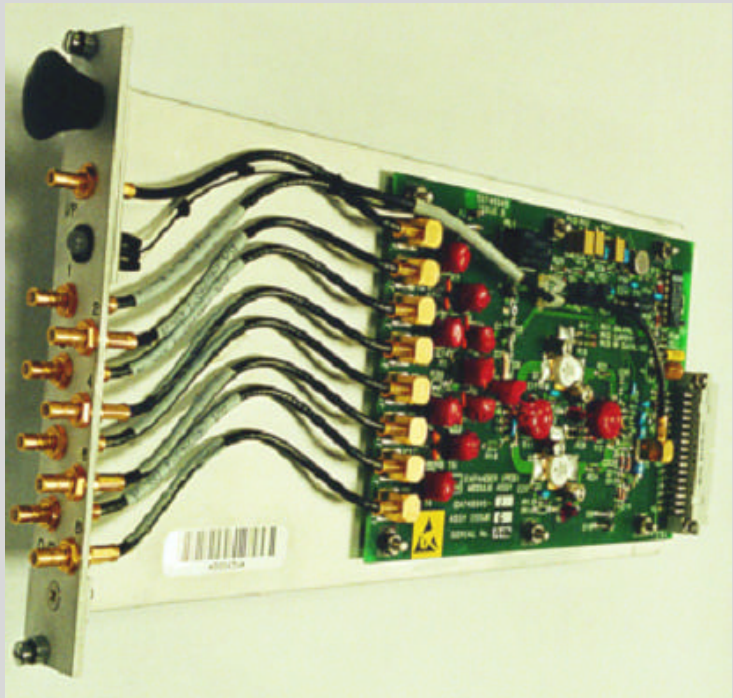


Arkonia Systems Limited

ARK7437 SERIES HF MULTICOUPLERS

- ▲ *Cost effective modular design*
- ▲ *Provides 72 outputs*
- ▲ *single Module used throughout*

The ARK7437 Series (as used in the **Javelin** System) of wideband HF Multicouplers is designed for use in receiving systems switching in the frequency range 0.5 to 30 MHz. They provide optimum coupling between one to nine antennas or signal sources, and up to 72 receiver or other monitoring equipment (depending on interconnect configuration).



The basis of the ARK7437 Series is a (1 x 8) Multicoupler Module containing a solid state HF amplifier, giving extremely low intermodulation products. This is of particular importance when handling high level HF signals, which can generate spurious products within the pass band of the amplifier.

The equipment is housed in a 19 inch rack mounting chassis (3U high) with all the signal interface connections situated on the rear panel. It has been designed for use in a ground benign environment and operates from standard mains power supplies, (with a DC option available). The multicoupler should be installed with an ARK7190-1 Fan Unit fitted immediately above the equipment to ensure adequate equipment cooling.

The choice of the number of basic (1 x 8) modules and interconnections depends upon the required number of inputs/outputs and the overall performance requirement.

The model chosen (see overleaf) should therefore be selected and the interconnection arranged for required performance; Arkonia Systems are happy to provide a consultation service for this system development process.

Specification (Standard Models)

Electrical:

		Primary Output	Secondary Output
Number of Inputs	1 to 9		
Number of Outputs	8 to max of 72		
Frequency Range	500 kHz to 30 MHz		
Average Gain		0 dB \pm 0.5 dB	0 dB \pm 1.0 dB
Noise Figure		5.5 dB max	8.0 dB max
VSWR	1.5 : 1 max		
Max Input Power Level (CW)	+40 dBm		
2 nd Order Output Intercept Point		+84 dBm min	+78 dBm min
3 rd Order Output Intercept Point		+42 dBm min	+39 dBm min
Isolation:			
Input to Input	60 dB min		
Output to Input		25 dB min	40 dB min
Output to Output	28 dB min		
Power Supply Requirements	110 – 120 or 220 – 240 Volts AC		
Dimensions	483 mm(W)x 133 mm(H)x 400mm (D)		

Environmental Specification:

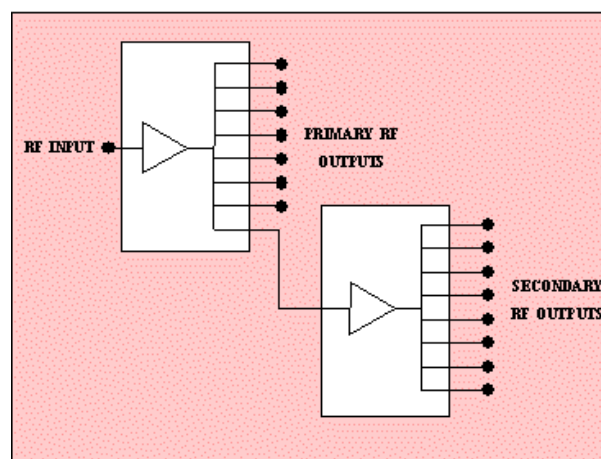
Operating Temperature	0°C to +50°C
Storage Temperature	-30°C to +70°C

Options: *(specified at time of ordering or in consultation with Arkonia design team)*

- Positive Gain Slope up to + 3 dB max. (for cable compensation)
- High Gain Modules up to + 6 dB max. (for improved system noise figure)
- Mix of Low & High Gain Modules in one unit.
- DC Power Supply of 24v at 500mA per module.

Model No.	No. Modules
ARK7437-1	1
ARK7437-2	2
ARK7437-3	3
ARK7437-4	4
ARK7437-5	5
ARK7437-6	6
ARK7437-7	7
ARK7437-8	8
ARK7437-9	9

Fig 1



FOR FURTHER TECHNICAL INFORMATION REQUEST: PRODUCT SPECIFICATION



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