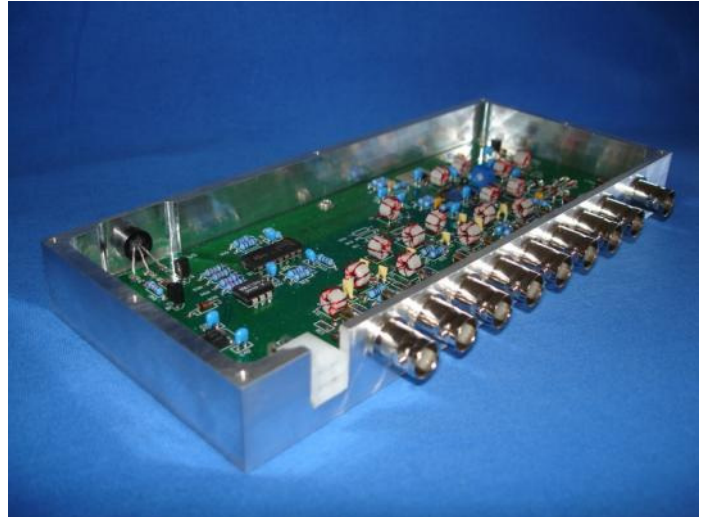


The HPMC001, is a HF 8 way multi-coupler. Offering a low cost, high performance solution for coupling up to 8 HF receivers to a single antenna. Using a transformer lossless feedback circuit, exceptional linearity performance is achieved. The unit is provided in a machined natural finish aluminum housing. Mounting behind a 1U panel is suggested alternatively it could be wall mounted. Health monitoring is provided. Local LED indicates 'STATUS', an opto-coupler output allows remote indication of 'STATUS'. Lighting protection is incorporated.



## Specification:

<u>Parameter</u>	<u>Limits</u>
Freq:	1.8-30Mhz
Gain:	1.5dB nominal
Gain Variation:	+/- 0.5dB max
Noise Figure:	6.5dB max. (typ 5dB)
Number of inputs:	1
Number of outputs:	8
Output Intercept OIP:-	
HF	
Measured at 2 tones 0dBm, 7Mhz and 11Mhz	
	3rd Order at 15Mhz, >35dBm min . (typ +37dBm)
	2nd order at 18Mhz, >+70dBm min. (typ +76dBm)
LF	
Measured at 2 tones 0dBm, 1.9Mhz and 2.3Mhz	
	3rd Order at 2.7Mhz, >35dBm min . (typ +37dBm)
	2nd order at 4.2Mhz, >+72dBm min. (typ +78dBm)
VSWR input 50ohm:	1.5:1 max. (Return Loss >14dB)
VSWR output 50Ohm	1.3:1 max. (Return Loss >17.7dB)
Isolation - Output to output:	>30dB min (typically 35-40dB)
Output to input:	>22dB min
Max. input signal CW	20dBm cont.

# Specification (cont.):

## Parameter

Lightning Protection

Power:

Connectors:

Dimensions:

Temp range:

## Limits

2kV 1.6ns risetime, 50ns duration

15-24V DC <0.1A. (Internally regulated)

RF BNC sockets

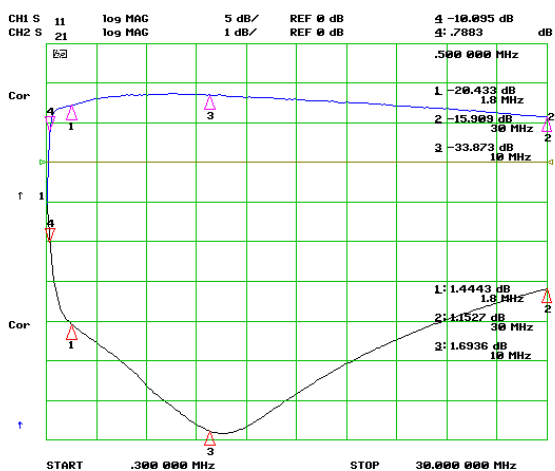
power DC connector is Molex , Mini fit Jr.

Approx 8" x 3" x 1" (excludes BNC)

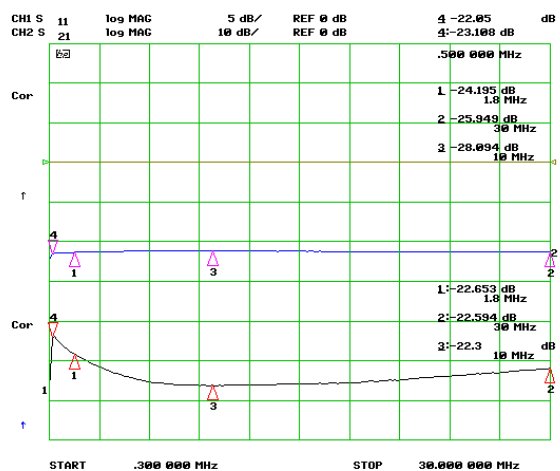
operating: -10C to +55C

storage: -20C to +70C

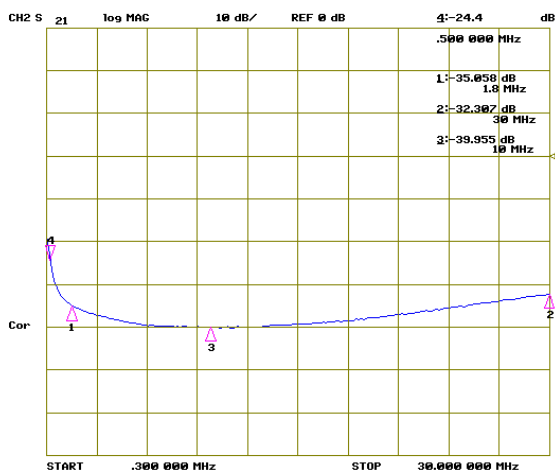
## Plots (typical)



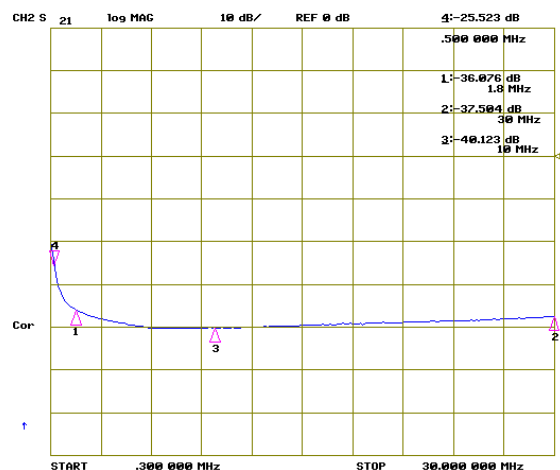
Input Ret Loss and Gain



Output Ret Loss and Rev. Isolation



Output isolation 1 - 2



Output isolation 1 - 8

Options: - The unit can be preceded by a HF band pass filter unit such as the FL003. This can help with strong out of band Broadcast signals.