

The HPMC-HF116A, is a UHF 16 way multi-coupler. The unit has high isolation performance solution for coupling up to 16UHF receivers to a single antenna. Using a state of the art high linearity amplifier, exceptional linearity performance is achieved. The unit is provided in a 19" 1U high rack mounted case. Health monitoring is provided. Local LED indicates 'STATUS', In addition 16 rear mounted LEDs show which output(s) are affected.



## Specification:

### Parameter

### Limits

Freq:	20-1000Mhz
Gain:	0 – 2dB (Average in Band)
Gain Variation:	+/- 1dB max
Noise Figure:	11dB max. (typ 10dB)
Number of inputs:	1
Number of outputs:	16
Input Output Impedance	50 Ohm
Output Intercept (OPIP):-	
3rd Order	> +18dBm. (Typ +20dBm)
2nd order	> +28dBm. (Typ +35dBm)
P1dB	> +3dBm
VSWR input 50Ohm:	2:1 max. (Return Loss >10dB)
VSWR output 50Ohm:	2:1 max. (Return Loss >10dB)
Isolation - Output to output:	>36dB min
Output to input:	>50dB min
Max. input signal CW	20dBm cont.
Power:	Mains 110/220V AC (Auto Selectable). <23W

## Alarms/Protection CCT

Alarms – The multicoupler has a 'on board' health monitoring circuit which monitors the operation of the active amplifier. Should a fault occur the 'Status' LED on the front panel will change from 'Green' to 'Red'. In addition there are 16 independent LEDs on the rear panel which are green when ok, and off when fail.

There are two failure modes:

**Critical** – Is when a single point failure affects all outputs. In this case the front panel alarm LED will be Red and all rear Green LED's will be extinguished.

**Non-Critical** – when a single output only is affected the front panel alarm LED will be RED and only the output(s) affected have an extinguished LED on the rear panel. In a non-critical alarm condition the 'good' outputs (Green) can still be used.

## Electrical:

AC Mains Power Connector	-	3 Pin IEC male connector.
AC Mains Switch	-	Illuminating Mains Switch is front panel located
AC Mains Fuse	-	1A, Rear panel mounted
DC Fuse	-	4A, Front panel mounted
110/220AC +/- 10%, 47-63Hz	-	Automatic

## Mechanical

Connectors:	I/P	1 x N type Female
	O/P	16 x BNC Female
		Power/Alarm DC connector is Molex, Mini fit Jr.
Dimensions:		19", 1U rack mount x 310 deep including connectors.

## Environmental

Temp range:	Operating: 0C to +50C
	Storage: -20C to +70C
Humidity	Operating 10% to 90% (Non condensing)
	Storage 5% to 95% (Non condensing)
EMI	FCC part 15

## Cooling

Fan assisted cooling, with rear upper and lower exhaust vents. NOTE: Do not block the exhaust vents leave adequate specs of at least 20mm above and below the vents.

Unit dissipates 20W

The case is vented top and bottom to facilitate forced air cooling