

10kHz to 1.5MHz, 32Way 2U High Isolation Multi coupler “MC-LF0132A-HI”

The MC-LF0132A-HI, is a LF 32 way multi coupler. The unit has high isolation solution for coupling up to 32 VLF/MF receivers to a single antenna. The unit is provided in a 19" 2U high rack mounted case. Health monitoring is provided. Local LED indicates 'STATUS'. In Addition there are 4 rear mounted LEDS to show the status of the output group status.

Options

- 01 Filter may be fitted to reject above 2Mhz, (HF Broadcast services).
- 02 Bias 'T' internally fitted for remote Pre-Amplifier



Specification:

Parameter	Limits
Freq:	10kHz to 1.5MHz
Gain:	1dB nominal (+/-1dB)
Gain Variation:	+/- 1dB max
Noise Figure:	@10kHz NF is <16dB (Typ 14.5dB) @100KHz NF is <11dB (Typ 8dB) @1.5MHz NF is <10dB (Typ 6dB)
Number of inputs:	1
Number of outputs:	32
Input Output Impedance	50 Ohms
Output Intercept (OPIP):-	3rd Order >30dBm min . 2nd order >+75dBm min. P1dB > +16dBm
VSWR INput 50 Ohm	2:1 max. (Return Loss >10dB)
VSWR output 50 Ohm	2:1 max. (Return Loss >11.8dB)
Isolation - Output to output: Output to input:	>40dB min >45dB min
Max. input signal CW	30dBm cont.
Power:	110/220V AC (Selectable), Power <50W

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 4 x 8way LEDs are present on the rear to identify which 'bank' of outputs are operative. The indication is a Green LED when ok and LED extinguished when fail.

The unique design of the amplifier ensures that levels on the RF output are always <+20dBm ensuring that the following RX's are not damaged by high level RF.

Electrical:	
AC Mains Power Connector	3 Pin IEC male connector.
AC Mains Switch	Illuminating Mains Switch is front panel located
AC Mains Fuse	Rear panel mounted
DC Fuse	Front panel mounted
110/220AC Selector	Rear Panel switch
Mechanical	
Connectors: I/P O/P	1 x N – Type Female 16 x RF BNC sockets
Environmental	
Temp range:	operating: 0C to +50C storage: -20C to +70C
Humidity	5% to 95% (Non condensing)
EMI	FCC Part 15
Cooling	
The unit dissipates up to 50W	Case is vented to facilitate cooling via forced air

Options: -

1 -The unit can be preceded by a LPF filter unit. This removes interference from HF Shortwave broadcasts.

2 – A internal DC feed can be fitted (Bias T), this places dc power to the RF IN port to support external series HPPA-VLF pre amplifier. The DC feed is monitored for correct operation and alarm is raised if it should drift outside of nominal parameters. An additional 'Pre Amp Status' LED is added to the front panel, and the remote alarm is added to the global remote alarm opto coupler output.

