Low Frequency Antenna Multicoupler Model LMC-32



TMC Technical Bulletin 104034



Thirty-Two Outputs at L/F (10KHz to 2MHz)

The Thirty-Two Output Low Frequency Antenna Multicoupler, Model LMC-32, is a broadband coupling unit, used for coupling one to thirty-two low frequency communications receivers to one common antenna. The multicoupler will provide a nominal 2db gain from the antenna to any receiver, with a wide dynamic range and low noise characteristic over the frequency range from 10KHz to 2MHz. The equipment has been designed to provide excellent isolation from receiver to receiver and from each receiver to the antenna. The Multicoupler is a solid state, transistortype design.



TECHNICAL SPECIFICATIONS

Number of Outputs:	32
Frequency Range:	10KHz to 2MHz
Input and Output Impedance:	75 ohms with a VSWR better than 1.5:1
Insertion Gain:	$2dB \pm 0.5dB$
Desensitization:	100 uv signal is compressed by 3dB maximum when a 7V peak-to-peak signal between 10KHz and 2MHz is applied simultaneously.
Noise Figure:	12dB max.10KHz to 100KHz9dB max.100KHz to2MHz2
Intermodulation:	With any two 0.5v RMS (referred to 75 ohms) signals applied at the antenna input, second and third order products are better than 65dB below 0.5v RMS (referred to 75 ohms).
Isolation:	-40dB, minimum, output-to-output -55dB, minimum, output-to-input.
Line Filters:	-40dB minimum attenuation between 10KHz to 150 MHz.
Power Supply:	115 VAC \pm 10% 48/62 Hz; power consumption approximately 100 watts.
Dimensions:	Width19 inches.Height3½ inches.Depth16 inches.
Weight:	17 pounds approximately.
MTBF:	20,000 hours as per RADC reliability handbook.
Temperature Range:	Class 4 military requirements Operating: 0° to $+50^{\circ}$ C Non-operating: -62° to $+75^{\circ}$ C.
Humidity:	Operational up to 95%.

-

Ľ

TMC Technical Bulletin 104034



Model LMC-32

Top cover removed

Loose Items Supplied:

Power Cable Assembly Technical Manual CA 10505 1N8034 1 each 1 each



TMC (Canada) Limited

RR NO. 5, Ottawa, Ontario, K1G 3N3 Telephone (613) 822-0244 CABLE: TEPEI - OTTAWA TELEX: 053-4146

SUBSIDIARY OF THE TECHNICAL MATERIEL CORPORATION Mamaroneck, New York

