

Tropospheric-scatter Equipment

IN conjunction with Radio Engineering Laboratories of New York, The Marconi Company can supply and install complete tropospheric scatter systems in most countries in the world. A wide range of equipment is available to meet requirements for medium and long-distance links of different channel capacities and various standards of performance. Typical specifications of the REL 2600, 2500 and 2300 Series of terminal equipment are given in the following table:

TYPICAL SPECIFICATIONS, TROPOSPHERIC SCATTER RADIO TERMINALS

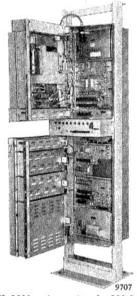
fi r	Operating requency ange Mc/s)	Power amplifier options (kW)	Receiver noise figure (dB)	Traffic baseband (kc/s)	I.F bandwidth options (Mc/s)	Intermodulation distortion (NPR) (dB)
:	350-450	1, 10, 100	2·0, 4·5 or 8	12	0.1	55
	755-985	1, 10, 75	2.0, 4.5 or 8	to	to	to
	700-2400	1, 10	2.0, 4.5 or 8	1300	15	60
	400-2700	1, 10	2·0, 4·5 or 9			
	400-5000	1, 10	3, 4·0 or 9			
	700-8500	1, 10	3, 4·0 or 9			
2500 Series	345475	1, 10, 100	2·0 or 7·5	12 to 308	0.5	55
	755-985	1, 10, 75	2·0 or 7·5	12	to	
	700-2400	1, 10	2.5 or 8.0	to	10	
	550-2700	1, 10	2.5 or 8.0	1052		
2300 Series	350-450	1, 10	2·0 or 7·5	12 to 204	0.75	45
	755-985	1, 10	2.0 or 7.5	12 to	to	
1	700-2400	1, 10	2.5 or 8.0	308	3.5	
1 2 2300 Series	700–2400 550–2700 350–450 755–985	1, 10 1, 10 1, 10 1, 10	2·5 or 8·0 2·5 or 8·0 2·0 or 7·5 2·0 or 7·5	to 1052 12 to 204 12 to	10 0·75 to	45

THE REL 2600 Series is a solid-state modular design of very small size, low-weight and low power consumption. It lends itself equally well to tactical, mobile, shipborne or fixed installations. The modular design allows easy maintenance and operation, and the addition of optional items to a basic system. The performance is superior to that of the 2500 series equipment described below. The equipment complies fully with military specifications and recognized International Standards such as those of the C.C.I.R.

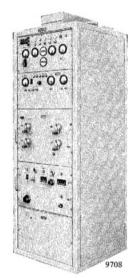
The REL 2500 Series is primarily designed for use in wideband, long haul, multi-channel communication circuits. Toll quality performance of several tandem trunks is maintained for circuits of over 4000 miles. Intermodulation for a receiver-transmitter combination is 55 dB or better.

The normal modulation index for this series is 3 or 6. The equipment has a capacity of up to 240 voice channels, and is available for use in mobile, shipboard and fixed station applications, being manufactured according to the latest military specification.

The REL 2300 Series is also designed for use in medium band, medium haul, multichannel communications circuits. Toll quality performance of several tandem trunks is maintained for circuits of over 1200 miles. Intermodulation for a receiver-transmitter combination is 45 dB or better. The normal modulation index for this series is 1·5. The equipment has a capacity of up to 72 voice channels. It is available for use in mobile and fixed station applications and is manufactured according to high military and commercial standards.



REL 2500 series exciter for 900 Mc/s.



1 kW power amplifier for 2000 Mc/s.

Marconi

The Marconi Company Limited Marconi House, Chelmsford, Essex Telephone: Chelmsford 3221 · Telex: 1953 Telegrams: Expanse Chelmsford Telex