

UHF RADIO LINK

The 8300G System was created by TFT to satisfy the needs of international broadcasters for program quality radio links in the 1.4 to 1.7 GHz band. The 8300G performance characteristics are very similar to those of the 8300 series. Some of the pertinent differences are listed here.

8300G TRANSMITTER SPECIFICATIONS

8301G RECEIVER SPECIFICATIONS

Operating Frequency	1.4 GHz - 1.7 GHz band, single-channel, fixed frequency.
Baseband Frequency Response	40 Hz - 53 kHz, + 0.1 dB, - 0.5 dB
Composite	53 kHz - 92 kHz + 0 dB, -2.5 dB
Monaural	40 Hz - 15 kHz \pm 0.5 dB
Signal-to-Noise Ratio	75 dB below 100% modulation, 50 μ sec de-emphasized, \pm 75 kHz deviation
RF Output	5-7 watts MAX typical; adjustable to 1 W with internal trimmer (Consult factory for other wattage)
Frequency Stability	\pm 1 ppm/year
Frequency Accuracy	
0°C to +50°C	0°C to +50°C
-10°C to +50°C	\pm 0.0005%
Spurious Signal Suppression	65 dB below carrier level (Non-harmonically related) 65 dB below carrier level (Harmonically related)
AM Noise	65 dB below carrier level
Signal Input	
Monaural	+6 dBm, 600 ohms balanced, 50 μ sec pre-emphasis internal. Input impedance 2K ohms
Stereo Composite	+6 dBm into 600 ohms, 10K ohms unbalanced BNC
SCA Inputs	+6 dBm into 600 ohms, 10K ohms unbalanced BNC

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Monaural	40 Hz - 15 KHz, \pm 0.5 dB
Left & Right Channel demodulated	40 Hz - 15 kHz, \pm 0.5 dB (50 μ sec de-emphasis)
Low pass Filter	-40 dB at 19 kHz
Harmonic and IM Distortion	
Monaural	< 0.3%, 40 Hz - 15 kHz (50 μ sec de-emphasis)
Left & Right Channel demodulated	< 0.3%, 40 Hz - 15 kHz (50 μ sec de-emphasis)
RF sensitivity	100 μ V (65 dB or better SNR de-emphasized, \pm 75 kHz deviation)
AM Rejection	55 dB (400 Hz @ 100% modulation)
Spurious and Image Rejection	60 dB
Signal Outputs	
Monaural	+6 dBm, 600 ohms balanced, adjustable from +3 dBm to +9 dBm
MPX	+6 dBm for 56% modulation, 600 ohms, BNC
SCA 1 & 2 (for SCA Decoder)	+6 dBm, 600 ohms output impedance.



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