



TECHNICHAL CHARACTERISTICS

AXON EXCITER/TRANSMITTER 30W TO 1200W

Frequency Range: 87.5 ÷ 108.00 MHz, Programmable in 10 KHz steps

On request $66 \div 74$ MHz (OIRT), $76 \div 90$ MHz (JPN) Bands.

Frequency Stability: better than ±150Hz from -10 to +50°C

Max deviation: +/-150kHz.

Frequency Control: Synthesizer µprocessor control.

Power Output: 30W, 50W, 100W, 150W, 300W, 600W, 1200W. Adjustable from 0W to maximum

power.

Output Impedance: 50 ohm.

Display: forward/reflection power and modulation indicator

Type of Modulation: Direct frequency modulation of carrier frequency, F3E Stereo with Subcarrier and

Mono .

Lock in Time: Typ. 4 second.

Off Lock Attenuation: ≥ -80 dBc.

Modulation Capability: ±150 KHz.

Modulation Mode: Mono, Stereo, Multiplex, SCA, RDS, Aux.

Preemphasis: Flat(0)/50/75 μ s selectable from front panel.

Asynchronous AM S/N Ratio: -60 dB below reference carrier with 100% AM modulation @ 400 Hz,

without FM modulation.

Synchronous AM S/N Ratio: -60 dB below reference carrier with 100% AM modulation@ 400 Hz with FM modulation \pm 75 KHz @ 400 Hz.

RF Harmonics: Exceeds ETSI/EBU/CCIR/FCC requirements. better than 84 dbc

RF Spurious: Exceeds ETSI/EBU/CCIR/FCC requirements. better than 84 dbc

Output Connectors: 30W to 600W N type connector, 1200W DIN 7/16 type connector

Output power on/off and adjustable from front panel and remotely.

Overall Efficiency up to 80%.

Monitor RF: -60 dBc, BNC connector

VSWR: 1.5:1 Maximum with automatic fold-back at higher VSWR

MONAURAL OPERATION

Audio Input Impedance: 600 ohm balanced, 15 Kohms unbalanced.

Audio Input Level: -6 to +12 dBm. (Other range on request)

Input Connector: XLR female.

Audio Frequency Response: ±0.15 dB, 30 Hz to 15 KHz.

Total Harmonic Distortion + Noise: 0.03% @ 400 Hz

Intermodulation Distortion: 0.03%, 1 KHz/1.3 KHz, 1:1 ratio

Transient Intermodulation Distortion: 0.03%, 2.96KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -89 dB RMS detector, -85 dB below \pm 75 KHz deviation, 50 μs de-emphasis, weighted.

MULTIPLEX OPERATION

Composite Input Impedance: 5 Kohm unbalanced.

Composite Input Level: 3.5Vp-p for ±75KHz deviation.

Input Connector: BNC female.

Composite Amplitude Response: : ≤ ± 0.1dB, from 30Hz to 53kHz

Total Harmonic Distortion + Noise: 0.03% @ 400 Hz

Intermodulation Distortion: 0.03%, 1 KHz/1.3 KHz, 1:1 ratio

Transient Intermodulation Distortion: 0.03%, 2.96 KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -89 dB RMS detector, -85 dB below ±75 KHz deviation, 50 μs de-emphasis, weighted.

STEREO OPERATION

Audio Input Impedance: 600 ohm balanced, 15 Kohm unbalanced.

Audio Input Level: -12 to +12 dBm.

Input Connector: XLR female.

Audio Frequency Response: ±015 dB from 30 Hz to 15 KHz.

Total Harmonic Distortion + Noise: 0,03% @ 400 Hz Intermodulation Distortion: 0,02%, 60Hz /7kHz

4:1 ratio +4dBu

Transient Intermodulation Distortion: 0.03%, 2.96 KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -85 dB RMS detector, -82 dB below ± 75 KHz deviation, 50 μs de-emphasis, weighted.

Stereo Separation: $30 \div 80 \text{ Hz} \ge -53 \text{ dB}$, $80 \text{Hz} \div 15 \text{ KHz} \ge -65 \text{ dB}$ (Typ. 70 dB).

Crosstalk attenuation: Main to Sub -55 dB 30 Hz to 15 KHz

38 KHz Suppression: ≥ -70 dB (typ. -85 dB).

Pilot Frequency: 19 KHz ± 1 Hz

Phase Pilot: ± 2° adjustable

Output Pilot: 1 Vpp., BNC female

Audio Filter Attenuation: ≥ -55 dB @ 19 KHz, > -45 dB 20 KHz to 100 KHz.

Modes: Stereo, Mono L+R, Mono L, Mono R.

AES/EBU OPERATION

Input Level: -10dBfs to 0dBfs

Input Connector: XLR female, optical TOS-LINK.

Input Impedance: 110 ohm.

Data Format: S/PDF,AES/EBU, IEC958, EIAJCP340/1201.

D/A Converter: 24 bit.

Sampling Frequency: from 32 to 96 KHz with automatic selection

Stereo separation (crosstalk): ≥50dB,100Hz to 5kHz

Amplitude response: ≤ ± 0.1dB, from 30Hz to 15kHz

FM S/N Ratio: -85 dB below ±75 KHz deviation, 50 μs de-emphasis, weighted.

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