



BEXT

XL Series
 300 W, 500 W
 & 1000 W
Ultra compact
Frequency Agile
FM Transmitters
/ Exciters

- Up to 1000 W of FM Power (XL 1000) from a lightweight, ultra compact, 3 rack space unit
- All functions including frequency reassignment can be remotely supervised & controlled by PC via Modem
- No proprietary software necessary to connect using any PC: can be supervised by Microsoft HyperTerminal
- Include low pass/harmonic filter and can be used as a stand-alone transmitter
- Modular architecture allows configuring unit for diverse applications
- Optional cards include: Stereo Generator, RDS Generator, Audio Limiter
- Cool running & high efficiency through advanced power supply design & proprietary RF Mosfet circuitry
- Convenient large LCD Display; frequency & all parameters settable through front panel menu or remotely
- Soft-start from RF mute status and automatic power control maintaining the output at any preset level
- Main parameters available also on rear terminal board for remote control
- Proportionate Auto-foldback allows uninterrupted operation even in case of high VSWR
- Meets or exceeds all FCC and CCIR requirements

General

Rated Output Power: 5-300 W (XL 300), 5-500 W (XL 500) or 5-1000 (XL 1000) cont. adjustable, ALC controlled
 RF Output Connector / Impedance: XL 300 & 500: "N" type Female; XL 1000: 7/8" EIA Flange or 7/16" connector, all 50 Ohm
 Frequency Range: 87.5 MHz to 108 MHz
 Frequency Programmability: direct from front panel in 10 KHz steps
 Type of modulation: FM direct carrier modulation at final frequency
 Frequency Stability: better than ± 100 Hz
 Spurious & Harmonic Suppression: meets or exceeds all FCC and CCIR requirements
 Asynchronous AM S/N Ratio: 65 dB below reference carrier with 100% amplitude modulation at 400 Hz without de-emphasis, no FM modulation present
 Synchronous AM S/N Ratio: 55 dB or better below reference carrier with 100% amplitude modulation at 400 Hz, without de-emphasis, FM modulation = ± 75 KHz at 400 Hz
 Transient Intermodulation Distortion: less than 0.05% measured with a 1KHz sine wave and a 1.3 KHz sine wave, ratio 1:1, 100% modulation
 AC Power Requirement: 117 or 230 V, $\pm 10\%$, 50-60 Hz, single phase
 Power Consumption, approx.: 500 W (XL 300); 900 W (XL 500); 1600 W (XT 1000) at full power
 Panel Size: 483 mm (19") W x 132 mm (5 1/4") H (3 standard rack spaces high)
 Overall Depth: 495 mm (19 1/2")
 Weight: XL 300: 13 Kg (29 Lbs); XL 500: 16 Kg (35 Lbs); XL 1000: 23 Kg (50 Lbs)
 Ambient Temperature Range: 0° C to 45° C (32° F to 113° F)
 Pre-emphasis: for FCC 75 microsec, for CCIR 50 microsec

Composite Operation

Composite Inputs: 1 BNC for MPX; XLR for L & R with optional stereo generator card
 MPX Input Impedance: 10 KOhm unbalanced
 MPX Input Level: 3.5 V P-P (1.237 V RMS / 4.1 dBm), adjustable - 12 dB / + 12 dB
 L & R Inputs on St. Gen. Card: XLR, 10 KOhm unbalanced / 600 Ohm balanced (switchable)
 Composite FM S/N ratio: > 78 dB below ± 75 KHz deviation at 400 Hz measured in a 30 Hz to 100 KHz bandwidth with 75 microsecond de-emphasis (RMS)
 Composite Amplitude Response: ± 0.8 dB, 30 Hz to 100 KHz
 Composite Total Harmonic Distortion: < 0.05%
 Composite Intermodulation Distortion: 0.05% or less, measured with a 1 KHz and a 1.3 KHz tones, 1:1 ratio, at 100% modulation
 Stereo Separation: > 65 dB, typical 72 dB
 Crosstalk: main to stereo subchannel and stereo subchannel to main > 55 dB (60 dB typical)
 SCA Inputs / SCA Impedance: 2 unbalanced BNC connectors / 10 Kohm
 SCA Input Levels: 3.5 V P-P (1.237 V RMS / 4.1 dBm) for ± 7.5 KHz deviation
 SCA Amplitude Response: ± 0.8 dB, 40 KHz to 100 KHz
 Crosstalk: 67 KHz SCA to main or to stereo subchannel > 65 dB
 Crosstalk: 92 KHz SCA to main or to stereo subchannel > 70 dB

Monaural Operation

Audio Input Impedance: 600 Ohm balanced or unbalanced; 50 dB common mode suppression
 Audio Input Level: 0 dBm (775 mV RMS/2.2 V P-P) for ± 75 KHz, adjustable
 FM S/N Ratio: > 70 dB below ± 75 KHz deviation @ 400 Hz measured in a 30 Hz to 20 KHz bandwidth with 75 microsecond de-emphasis (RMS)
 Audio Frequency Response: ± 0.8 dB, 30 Hz to 15 KHz
 Total Harmonic Distortion: < 0.1% (0.05% typical)
 Intermodulation Distortion: 0.05% or less, measured with 1 KHz & 1.3 KHz tones, 1:1 ratio, at 100% modulation