

### STX LP 3 kW - Specifications (D) : Technical Specifications

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#### RF SPECS

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**Output Power:****Range:****FM:**

750-3000 W

**FM+HD (with external exciter):**

525-1920 W (-20 dB); 330-1230 W (-10 dB)

**HD Only (with external exciter):**

225-900 W

**Accuracy:**

+/-5%

**Resolution:**

3 W

**Efficiency:**

62% or greater FM only

**VSWR:**

Rated power into 1.5:1

**Output Impedance:**

50 ohms nominal

**Frequency:****Range:**

87.5 MHz to 108 MHz, programmable in 10 kHz steps

**Stability:**

+/-150 Hz, -10 degrees to +50 degrees C

**RF Harmonics Suppression:**

Suppression meets all FCC/DOC requirements and CCIR recommendations

**Modulation:****Type:**

Direct-to-channel; FM (FM+HD or HD Only with external exciter)

**Capabilities:**

300 kHz

**Regulatory:**

Meets all FCC/DOC/CE and IEC 215 safety requirements

#### FM AUDIO SPECIFICATIONS WITH INTERNAL EXCITER

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**Composite:****Connector Type:**

BNC un-balanced

**Input Level:**

3.5 V p-p nominal for 75 kHz deviation

**Impedance:**

10k ohms

**Amplitude Response:**

+/-0.03 dB, 30Hz to 53kHz; +/-0.25 dB, 53Hz to 100kHz

**Total Harmonic Distortion + Noise:**

0.1%, 20Hz to 53kHz; 0.15%, 53kHz to 100kHz

**Intermod Dist:**

0.13%, SMPTE (60/7000Hz, 1:1 ratio)

# Broadcast Electronics

## Technical Specifications

**S/N Ratio:**

80 dB below 100% modulation @ 400Hz

**Asynchronous AM S/N Ratio:**

Better than 65dB (typical 70dB) below referenced to 100% peak AM modulation

**Synchronous AM S/N Ratio:**

Better than 53dB (typical 60dB) below referenced to 100% peak AM modulation; 75 usec de-emphasis with 75kHz deviation @ 400Hz sine wave

**SCA1 & SCA2:****External:****Connector Type:**

BNC un-balanced (2)

**Input Level:**

3.5 V p-p nominal for 10% injection level

**Impedance:**

10k ohms

**Frequency Response:**

+/-0.5dB; 53kHz to 100kHz

**RDS:****External:****Connector Type:**

BNC un-balanced

**Input Level:**

3.5 V p-p nominal for 10% injection level

**Impedance:**

10k ohms

**Frequency Response:**

+/-0.5dB; 53kHz to 100kHz

### FM AUDIO SPECIFICATIONS (INTERNAL EXCITER AND OPTIONAL STEREO GENERATOR)

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**Modes:**

Stereo, Mono (L+R), Mono L, Mono R

**Stereo:****Connector Type:****AES:**

XLR

**L&R:**

XLR

**Input Level:****AES:**

-2 dBFS for 100% modulation

**L&R:**

+10 dBm for 100% modulation into 600 Ohm

**Impedance:****AES:**

110 Ohm balanced

**L&R:**

600 Ohm or 10K Ohm selectable; balanced

**Amplitude Response:****AES:**

+/-0.25 dB, 30Hz to 15kHz

**L&R:**

+/-0.25 dB, 30Hz to 15kHz

**THD + Noise:**

# Broadcast Electronics

## Technical Specifications

**AES:**

0.1% or better

**L&R:**

0.1% or better

**Intermod Dist:****AES:**

0.1% or better

**L&R:**

0.1% or better

**S/N Ratio:****AES:**

75 dB below 100% modulation @ 400 Hz

**L&R:**

75 dB below 100% modulation @ 400 Hz

**Separation:****AES:**

55 dB (60 dB typical), 20Hz to 15kHz

**L&R:**

55 dB (60 dB typical), 20Hz to 15kHz

**Preemphasis:**

50us, 75us, none

**19kHz Output:**

Connector:

BNC Un-balanced

Impedance:

4.7K Ohm min load

Level:

1 vp-p

**Pilot Stability:**

+/-0.3 Hz, 0 degrees C to 50 degrees C

### MECHANICAL/PHYSICAL

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**Size:****Unpacked:**

19" W x 22.75" H x 26" D (48.3 cm W x 57.8 cm H x 66.1 cm D)

**Weight:****Unpacked:**

168 lbs (76.2 kg)

**RF Output Connector:**

1 5/8" Hard Line Coax, 50 Ohm

### ENVIRONMENTAL

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**Temperature:**

-10 degrees to +50 degrees C

**Altitude:**

10,000 ft (3,048 M)

**Humidity:**

95% Non-Condensing

### ELECTRICAL



# Broadcast Electronics

## Technical Specifications

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**AC Input Voltage:**

180-260 VAC, 47-63Hz (Single Phase)

**Disconnect Size:**

60 A

**AC Wire Size:**

#4 Copper AWG, Type THHN

**Current Draw:**

25.5 A Typical (Measured at 208 VAC, 3 kW output)

**Power Consumption:**

5.3 kW (calculated)

**Cooling Air Requirements:**

800 CFM

**Heat Dissipation:**

2300 W at 3 kW RF Output into 50 Ohm load

**BTU:**

7,850 BTU/H at 3 kW RF Output into 50 Ohm load

**Power Factor:**

0.98 at full load

**Surge Protection:**

Suitable Surge Arrestor Required

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**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

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