

STX LP 5 kW - Specifications (D) : Technical Specifications

RF SPECS

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

1250-5000 W

FM+HD (with external exciter):

875-3200 W (-20 dB); 550-2050 W (-10 dB)

HD Only (with external exciter):

375-1500 W

Accuracy:

+/-5%

Resolution:

5 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

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)

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

Size:**Unpacked:**

19" W x 33.25" H x 26" D (48.3 cm W x 84.5 cm H x 66.1 cm D)

Weight:**Unpacked:**

249 lbs (112.9 kg)

RF Output Connector:

1 5/8" Hard Line Coax, 50 Ohm

ENVIRONMENTAL

Temperature:

-10 degrees to +50 degrees C

Altitude:

10,000 ft (3,048 M)

Humidity:

95% Non-Condensing

ELECTRICAL



Broadcast Electronics

Technical Specifications

AC Input Voltage:

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

Disconnect Size:

100 A

AC Wire Size:

#2 Copper AWG, Type THHN

Current Draw:

42 A Typical (Measured at 208 VAC, 5 kW output)

Power Consumption:

8.8 kW (calculated)

Cooling Air Requirements:

1200 CFM

Heat Dissipation:

3800 W at 5 kW RF Output into 50 Ohm load

BTU:

13,000 BTU/H at 5 kW RF Output into 50 Ohm load

Power Factor:

0.98 at full load

Surge Protection:

Suitable Surge Arrestor Required

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

