

STX LP 1 kW - Specifications (D) : Technical Specifications

RF SPECS

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

250-1100 W

FM+HD (with external exciter):

175-700 W (-20 dB); 110-450 W (-10 dB)

HD Only (with external exciter):

75-330 W

Accuracy:

+/-5%

Resolution:

1 W

Efficiency:

64% typical

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/IC/ETSI requirements

Modulation:**Type:**

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

Capabilities:

300 kHz

Regulatory:

Meets all FCC/IC/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)

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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

Pilot Stability:

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

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:**

+/-0.5 dB, 30Hz to 15kHz

L&R:

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+/-0.5 dB, 30Hz to 15kHz

THD + Noise:

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:

-50dBr 30Hz to 15kHz

L&R:

-50dBr 30Hz to 15kHz

Preemphasis:

50us, 75us, none

RDS:

19kHz Output:

Connector:

BNC Un-balanced

Impedance:

4.7K Ohm min load

Level:

1 vp-p

MECHANICAL/PHYSICAL

Size:

Unpacked:

19" W x 5.25" H x 26" D (48.3 cm W x 13.4 cm H x 66.1 cm D)

Weight:

Unpacked:

44 lbs (20 kg)

Airflow:

Outlet Size:

75 square inches (493 square cm); Rear of unit

RF Output Connector:

Type N Connector, Female

ENVIRONMENTAL

Temperature:

-10 degrees to +50 degrees C

Altitude:

10,000 ft (3,048 M)



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Humidity:

95% Non-Condensing

ELECTRICAL

AC Input Voltage:

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

Disconnect Size:

20 A

AC Wire Size:

#12 Copper AWG, Type THHN

Current Draw:

8.5 A Typical (Measured at 208 VAC, 1 kW output)

Power Consumption:

1.75 kW (calculated)

Cooling Air Requirements:

200 CFM (5.7 M3/min)

Heat Dissipation:

750 W at 1 kW RF Output into 50 Ohm load

BTU:

2560 BTU/H at 1 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

