

# STXe 5 & 6

Transmitter Series 5 and 6 kW



## Genesis Series Modulators / Exciters

The Broadcast Electronics STXe medium-power FM Radio transmitters herald the next step toward reducing capital expenditure and minimizing operating costs for Radio Broadcasters. The transmitter

## STX Line of Transmitters Expands

The Broadcast Electronics STX line of solid-state transmitters continues to expand with the new STXe-5 and 6 5 and 6kW FM system. Based on the RF technology of the STX 10 and the exciter technology of the STXe and STX LP transmitters, the STXe-5 provides unparalleled performance and reliability in its class.

## Hot-Pluggable / Front Access Power Supply

Unique at this power level, the STXe series includes four RF power supply modules that are front accessible and hot-pluggable. Broadcast Electronics has poured its many years of pioneering experience in state-of-the-art RF modulation technology into the design of the STXe range of transmitters, achieving efficiency values of up to 75%, including the cooling system. The adaptive efficiency optimization feature ensures maximum energy cost savings even after channel changes or output power adjustments.



# elenos group

DEDICATED RELIABLE CREATIVE



Typically available for delivery  
in 2 to 3 weeks!

## Key Features & Benefits

- Best in Audio Quality
- Up to 75% AC to RF Efficiency
- Hot-Pluggable /front access power supplies
- IP Connectivity with superior GUI for anytime, anywhere access

## Superior Performance

The STXe-5 is designed to exceed the FM transmitters of the past

- The best in audio quality
- SNMP level 3 control and security

and control options from a laptop, tablet, or smartphone.

Three levels of security control are available from "view only" to "complete control," ensuring secure access for the correct personnel.



## Maximum Redundancy

The STXe-5 system is made up of two separate STXe-3 transmitters which provide dual PSUs, power amplifiers, and optional dual modulators ensuring excellent transmitter availability and making sure you stay on-air under extreme circumstances.



**ELENOS**  
World's Broadcast Experience



**PRO TELEVISION**

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## SPECIFICATIONS

<b>RF SPECIFICATIONS</b>	
Output Power	5500W Nominal / 6200W Max
Efficiency	70% typical AC to RF (FM Only)
Modulation Type	Direct-to-channel digitally generated FM (no analog up-conversion); FM only
Capabilities	Up to 300 kHz
Audio Inputs	AES, L&R analog, composite, SCA/ RBDS/RDS external generator input, SCA audio inputs (2)
Asynchronous AM S/N Ratio	Better than -65dB (-70dB Typical) referenced to average peak-to-peak carrier amplitude. 75uSec de-emphasis
Synchronous AM S/N Ratio	Better than 60dB referenced to average peak-to-peak carrier amplitude. 75kHz deviation @400Hz
Spurious and Harmonic	85dB or better; low pass filter standard
<b>AUDIO SPECIFICATIONS</b>	
Amplitude Response	Composite/ AES: +/-0.03dB, 30 Hz to 53 kHz; +/- -0.1dB, 53kHz to 100kHz Analog L&R: +/-0.25, 30Hz to 53kHz
Total Harmonic Distortion + Noise	Composite: 0.005% or less @400Hz, 10-22kHz bandwidth, 75uSec deemphasis. AES/ Analog L/R Stereo: -0.01 typical @400 Hz, 10-22kHz bandwidth 75uSec deemphasis
Composite Intermodulation Distortion	0.13% SMPTE (60/7000 Hz, 1:1 ratio), DIM-B: 0.008% (14kHz)
S/N Ratio	Composite: 85dB below 100% modulation @400 Hz. AES/ Analog L&R Stereo: 80dB below 100% modulation @400Hz. Analog L/R: -70dB, 30Hz to 15kHz
Stereo Separation	AES: -74dB below 100% modulation @400Hz. Analog L/R: -70dB, 30Hz to 15kHz
<b>MECHANICAL/PHYSICAL</b>	
Dimensions	19"W x 14" (10RU) H x 28.33" D (48.3 cm W x 35.4 cm H x 72 cm D)
Weight	150lbs (68 kg) without cabinet
RF Output Connector	1 5/8" EIA
<b>ENVIRONMENTAL</b>	
Temperature	-10 degrees to +50 degrees C
Altitude	10,000 ft (3,048 M)
Humidity	95% non-Condensing
<b>ELECTRIC</b>	
AC Input Voltage	200-264 VAC, single phase, or 308 VAC three phase, 47-63Hz.
Disconnect Size	80°
Cooling Air Requirements	600 CFM (17M3/min)
Heat Dissipation	3,000 W at 6.2 kW RF Output into 50 Ohm load
BTU	10,236BTU/H at 5kW RF Output into 50 Ohm load

