



Tomorrow's Radio Today

STXe-4, STXe-5 & STXe-6 Transmitter Series

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
- HD Radio® Compatible



Shown with optional cabinet

The Broadcast Electronics STXe-4, STXe-5, & STXe-6 medium-power FM Radio transmitters herald the next step toward reducing capital expenditure and minimizing operating costs for Radio Broadcasters. The transmitter family is based on the well-established STX-e platform and carries forward all its proven strengths.

BE STX Line of Transmitters Expands

The Broadcast Electronics STX line of solid-state transmitters continues to expand with the new STXe 4, 5 and 6kW FM systems. Based on the RF technology of the STX 10 and the exciter technology of the STXe and STX LP transmitters, the STXe-4, 5 and 6 provide unparalleled performance and reliability in their 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.



GUI

With IP connectivity at the transmitter site, the STXe-4, 5 and 6 provide all important transmitter operating conditions necessary.

Superior Performance

The STXe-4, 5 and 6 are designed to exceed the FM transmitters of the past

- The best in audio quality
- SNMP level 3 control and security
- Full digital operation
- HD compatible

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.

HD Radio, DAB and DRM

Exceptional performance for digital operation in all standards is provided by the BE patented VPex assembly, provided by the **PRO-TV inside** module.

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SPECIFICATIONS

RF SPECIFICATIONS	
Output Power	See below
Efficiency	70% typical AC to RF (FM Only)
Modulation Type	Direct-to-channel digitally generated FM (no analog up-conversion); FM only, HD Radio only, or HD Radio + FM, DRM+
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
AUDIO SPECIFICATIONS	
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
MECHANICAL/PHYSICAL	
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
ENVIRONMENTAL	
Temperature	-10 degrees to +50 degrees C
Altitude	10,000 ft (3,048 M)
Humidity	95% non-Condensing
ELECTRIC	
AC Input Voltage	200-264 VAC, 47-63Hz (Single Phase)
Disconnect Size	80°
Cooling Air Requirements	600 CFM (17M3/min)
Heat Dissipation	3,000 W at 6 kW RF Output into 50 Ohm load
BTU	10,236BTU/H at 6kW RF Output into 50 Ohm load

STXe-4, 5 & 6 Transmitter



HD Radio® Power Capabilities

	STXe-4	STXe-5	STXe-6
Nominal Power	4,000	5,000	6,000
Max Power Rating	4,400	5,500	6,600
FM Analog Power Rating	400-4,400	500-5,500	600-6,600
FM+HD -20dBc	4,000	5,000	5,400
FM+HD -14dBc	4,000	4,800	4,800
FM+HD -10dBc	3,600	3,600	3,600
HD Only - 20dBc	2,200	2,200	2,200
HD Only - 14dBc	2,100	2,100	2,100
HD Only -10dBc	1,760	1,760	1,760

STXe-4, 5 & 6 Transmitter Series



Taking the next step is easy with Broadcast Electronics. Contact your sales representative today to discuss solutions that will work for you and your station(s).

To contact your BE sales representative, simply visit our website at bdcast.com or call 217.224.9600 and learn more about what BE has to offer.

BE manufactures complete RF systems for radio and TV. Our products encompass program generation, audio and data management, interfacility transport and analog and digital Radio and TV transmission.

BE and Elenos Group products are used daily in more than 40,000 installations in nearly 100 countries. For over sixty years, BE pioneering developments have set industry standards for innovation and reliability, while providing broadcasters with new options for operational productivity and income generation.

BE is headquartered in Quincy, Illinois, USA, and is represented worldwide by a network of local representatives.

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