

T2 Series

High Power, Single Tube, FM Transmitters at 20, 25, 30 & 35 KW



FM35000T2

Our single Tube High Power FM Transmitters offer you exceptional quality at affordable prices.

Built for the real world, these RF workhorses offer long term reliability and features not found in any other single tube transmitter.

Our T2 series is compatible with HD Radio®

Features

- 1/4 Wave Grounded Grid PA Cavity
- Fibre Optic PA Arc Detection
- PA Temperature Protection
- Advanced Control System
- CD Quality Audio
- More internal sensors than any other transmitter

Broadband Quarter Wave Cavity

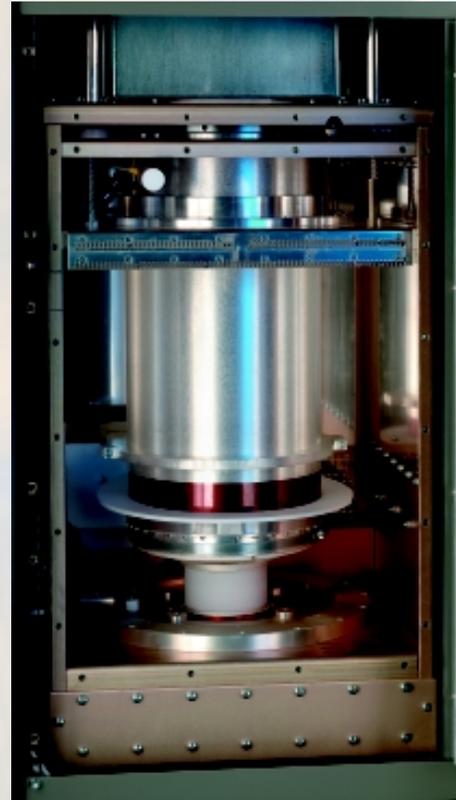
Armstrong's PA design offers the best advantage to our customers.

Our Quarter Wave cavity is broadband with tuning and loading accomplished using precision motors for exacting results.

Superior air flow for cooling is enhanced by our chimney configuration which ensures warm air is immediately exhausted from the PA cavity and the tube.

Armstrong design incorporates the best features from the two transmitter designs used in the industry. You get the advantage of a high gain tetrode tube combined with the stability of the Grounded Grid configuration.

This design eliminates oscillation and the need for neutralization.



Power Supply Drawer

Armstrong's design allows for ease of access and maintenance.

The power supply is built on a dolly that can be pulled completely out of the main cabinet. This gives the engineer complete, safe and easy access to all power supply components.

In addition heat sensors are placed at critical locations to alert you of overheating. These will alert you to the need to take preventative action to be taken before a critical components are damaged.

Our design takes these additional steps to keep you **ON THE AIR!**

Monitoring and Control

Advanced PA Monitoring

In keeping with our overall design philosophy to maximize maintenance efficiency and give advanced warning of potential trouble Armstrong has incorporated two crucial and unique monitoring devices in the PA.

The First is **thermostatic protection** which will shut down the transmitter in the event of PA overheating before major damage to the Tube or other PA components can occur. Secondly we have added a **fiber optic arc detection** circuit to alert you of PA arcing. This circuit initiates an alarm advising you of the arcing condition so immediate corrective action can be taken.

Power Supply Monitoring

Armstrong is the only manufacturer who incorporates heat sensors on key components in the transmitter power supply. These sensors are used to trigger user selected alarms which can alert your engineer to components which are overheating. This advanced facilitates troubleshooting to ensure your transmitter stays on the air.

Transmitter Control

Armstrong's T2 series offers a station a complete advanced microprocessor control system. The main transmitter controller is located on the transmitter front panel and provides transmitter status at a glance.

The controller uses LED's in to indicate the status of all alarms, interlocks, overloads and monitoring circuits. Transmitter readings are displayed on two analog meters for quick reference. The controller is remote control ready and easily interfaces with commercially available dial up remote control systems.

An hour counter is also located on the transmitter front panel as is an Emergency Shut Down button.

LCD Controller

In addition to the main transmitter controller Armstrong's High Power Transmitters include the LCD controller as a standard feature. This system can provide vital transmitter information to your station engineer.

The LCD controller serves many functions.

It stores transmitter operational parameters, status and alarm settings, and it continually updates itself holding the data from the last one minute of operation in non volatile memory.

The handy LCD display screen, on the transmitter front panel, allows instant access to all readings and functions. Operational parameters can be verified or changed as desired and alarm settings can be adjusted with ease using the scroll knob next to the display.

Software is provided to allow complete password protected access to the LCD Controller from a remote computer via internal data modem.



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Technical Specifications

Electrical Characteristics

Frequency Range	88-108mHz (Broadband PA)
RF Power Output	FM-20000T2 500W - 21KW FM-25000T2 1KW - 26 KW FM-30000T2 1KW - 31KW FM-35000T2 1KW - 35.5KW
Final Tube	FM-20000T2 4CX15000A FM-25000T2 4CX20000A FM-30000T2 4CX20000A FM-35000T2 4CX20000A
IPA	FM-1000LCD: FM-20000T2, FM-25000T2 FM-1500LCD: FM-30000T2, FM-35000T2
PA Input Drive Required	FM-20000T2 750 watts FM-25000T2 900 watts FM-30000T2 1100 watts FM-35000T2 1500 watts
RF Input and Output Impedance:	50 Ohm
RF Output Connector:	3 1/8" EIA
RF Harmonic and Spurious Suppression:	Meets or Exceeds all FCC, IC & CCIR requirements
Power Consumption: (.96 power factor)	FM-20000T2 31,000 watts FM-25000T2 38,500 watts FM-30000T2 46,000 watts FM-35000T2 50,750 watts
AC Power Requirements	208-240VAC, 50-60 HZ, 3 phase

Mechanical & Environmental Characteristics

Dimensions	44.5" Wide x 33" Deep x 76" High
Weight	FM-20000T2 1690LBS // 1940LBS crated FM-25000T2 1900LBS // 2150LBS crated FM-30000T2 2100LBS // 2350LBS crated FM-35000T2 2400LBS // 2600LBS crated
Cooling	Forced Air
Operating Temp.	-10 to + 50 degrees C
Humidity	95% Non- Condensing
Altitude	7500' ASL (High Altitude Blower Package Optional)



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