

# T2 Series

**Medium Power, Single Tube, FM Transmitters at 5, 10 & 15 KW**



FM-5000T2 with optional CD Exciter

Our single Tube Medium 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 Amplifier
- ☐ Fibre Optic PA Arc Detection
- ☐ PA Temperature Protection
- ☐ Advanced Control System
- ☐ Optional CD Quality Exciter
- ☐ More internal sensors than any other transmitter



**ARMSTRONG**  
TRANSMITTER CORPORATION

## Broadband Quarter Wave Cavity

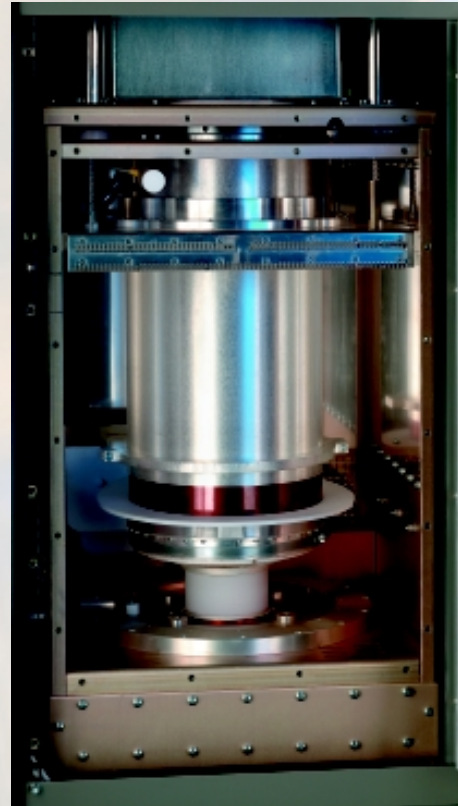
Armstrong's PA design offers the best advantage to our customers.

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's Grounded grid design gives you maximum transmitter stability by eliminating oscillation and the need for neutralization. Plus the design assures you extended tube life.

Tube life of over four years is quite common with these GroundedGrid transmitters.



## 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.

### Optional LCD Controller

In addition to the main transmitter controller Armstrong offers the option of adding our LCD controller to medium power transmitters. 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

<b>Frequency Range</b>	88-108mHz (Broadband PA)
<b>RF Power Output</b>	FM-5000T2 500W - 5.5KW FM-10000T2 1KW - 10..5 KW FM-15000T2 1KW - 15.5KW
<b>Final Tube</b>	FM-5000T2 3CX3000A7 FM-10000T2 3CX15000A7 FM-15000T2 3CX15000A7
<b>IPA</b>	FM-500LCD : FM-5000T2, FM-10000T2 FM-1000LCD : FM-15000T2
<b>PA Input Drive Required</b>	FM-5000T2 350 Watts FM-10000T2 450 watts FM-15000T2 900 watts
<b>RF Input and Output Impedance:</b>	50 Ohm
<b>RF Output Connector:</b>	1 5/8" EIA
<b>RF Harmonic and Spurious Suppression:</b>	Meets or Exceeds all FCC, IC & CCIR requirements
<b>Power Consumption:</b> (.96 power factor)	FM-5000T2 8.5 Kw FM-10000T2 17 Kw FM-15000T2 25 Kw
<b>AC Power Requirements</b>	208-240VAC, 50-60 HZ, single or three phase

### Mechanical & Environmental Characteristics

<b>Dimensions</b>	22.25" Wide x 33" Deep x 76" High
<b>Weight</b>	FM-5000T2 725LBS // 850LBS crated FM-10000T2 990LBS // 1170LBS crated FM-15000T2 1090LBS // 1270LBS crated
<b>Cooling</b>	Forced Air
<b>Operating Temp.</b>	-10 to + 50 degrees C
<b>Humidity</b>	95% Non- Condensing
<b>Altitude</b>	7500' ASL (High Altitude Blower Package Optional)



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