

# TX50 V3 | DDS FM TRANSMITTER



## A fully featured direct to channel digital FM exciter with all the bells and whistles!

This 50W FM transmitter is perfect for LPFM stations, community stations, emergency broadcast kits, military applications or as a truly reliable back-up transmitter or exciter for national broadcasters. Whatever the application, the TX50 V3 will take it in its stride.

The built in 4-band DSPX audio processing, eliminate the need for a separate processor saving you \$\$\$\$. Monitor and control this transmitter using, just about, any method you can think of. Sleep easy at night with a whole host of maintenance friendly, stress busting features.

## Why you'll never regret choosing the TX50 V3.

- 5- 50 watts RF output power
- Direct to channel digital modulation
- GPS inputs for SFN application
- XLR analogue & digital inputs
- Dual MPX / sca in and outs
- Lab grade DSP stereo generator
- RDS generator
- DSPX multi-band processor inside
- VSWR and temp monitoring
- Events, alarms and actions
- RS232, Telnet, SNMP
- Mobile ready web browser control

## SPECIFICATION

| RF                     |                                      |
|------------------------|--------------------------------------|
| Harmonics              | better than -75 dBc                  |
| Spurious               | <-90dBc                              |
| Frequency range        | 87.5 - 108 MHz                       |
| Frequency steps        | 10KHz to 100KHz selectable           |
| Frequency selection    | User interface or web remote control |
| Frequency control type | direct to channel DDS                |
| Frequency stability    | <+/- 100 Hz                          |
| Modulation             | DDS                                  |
| Synchronous AM Noise   | >60dB% min (at normal deviation)     |
| Asynchronous AM Noise  | >70dB                                |
| RF Connector           | N-type 50 Ohm                        |

| AUDIO & MPX I/O              |                                   |
|------------------------------|-----------------------------------|
| MPX input / output connector | 2 X BNC IN / 2 X BNC OUT          |
| MPX input / output impedance | 10k                               |
| MPX input level              | -10dB to +10dB (adjustable)       |
| MPX input / output response  | +/- 0.01 dB, 5 Hz to 100 kHz      |
| Audio input connectors       | XLR balanced                      |
| Analog input impedance       | 10 kOhm                           |
| AES/EBU sampling rates       | 32KHz-192KHz (MPX OVER AES READY) |

| STEREO                      |                              |
|-----------------------------|------------------------------|
| Subcarrier generation       | DSP                          |
| Pilot                       | 19 kHz +/- 1 Hz (adjustable) |
| Pilot generation            |                              |
| Output level                | 0dBu - 12dBu adjustable      |
| 15 kHz filtering            | 80dB at 19kHz (DSP based)    |
| Overshoot filter clipping   | DSP based                    |
| Spurious: >80 kHz / >160kHz | > -60dB / > -80dB            |
| Stereo separation           | >50dB (20Hz - 15kHz)         |

| OTHER                   |  |
|-------------------------|--|
| RF Power                | 5W - 50W   |
| Voltage input           | 100-265 VAC  |
| Environmental           | 104W average @ 50W RF  |
| Switched mode approvals | UL / TUV / CE  |
| Size (mm)               | 485mm x 380mm x 50mm   |
| Weight                  | 3.7kg  |
| User Interface          | 3 buttons, rotary encoder & 256x64 graphics display                                  |
| External control        | I/O Alarms D9-type Male; RS232 D9-Type Female<br>Telnet and Web remote RJ45 Ethernet |

