

TR50 V3 | DDS FM TRANSLATOR

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bw broadcast Ltd

**A fully featured direct to channel digital FM Translator with all the bells and whistles!**

The TR50 V3 pulls in weak signals and re-broadcasts with amazing clarity thanks to it's DSP receiver and ultra low distortion modulator, even at the most challenging translator sites.

Because it's a 'single box' solution it's faster and easier to set-up, and will save you space and money, in purchasing & maintenance.

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 TR50 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 Telnet and Web remote RJ45 Ethernet

