



TX30 and TX 300 are new FM driver/transmitters featuring high reliability, ultimate design solution, friendly use and maintenance, cost-effectiveness. Full normal power is guaranteed in any condition and thanks to the switch mode ac mains power supply (90 to 260 VAC) these transmitters can be installed in any country. The units can be programmed by remote software (web or GSM modem) or used in a N+1 system also by means of a new audio interface with automatic input selection and digital AES/EBU.

FREQUENCY

Range	87,5÷108MHz
Setting	10KHz steps (by KEY BORAD; GSM; WEB)
Setting Accuracy	+/- 50Hz (internal trimmer)
Generation	PLL synthesizer Microprocessor Controlled
Reference	VCTCX0 12.8 MHz
Ref. Stability Vs Temp.	+/- 200Hz @ (-10+50°C); +/- 300Hz @ (-20+70°C)
Aging VCTCX0	1ppm @ year
Frequency Stability	Better than +/- 300Hz over 3 month
Stability Frequency Deviation	± 2,5% over 6 months

RF OUTPUT SPECIFICATION

Harmonics suppression	< -75dBc
Spurious Emission	< -90 dBc
Off lock Attenuation	> 60 dBc
S/N RATIO	< 73 dB (according Limit ETSI EN 302 018)
THD	0,10%
VSWR	Less than 1,5:1
Impedance RF	50 Ohm
Test Point	a) BNC connector RF -40dBc b) BNC connector LF (internal MPX)



MONO/MPX SPECIFICATION

Mono/MPX Impedance	600 Ohm / 10 K Ohm
Mono Connector	XLR Balanced
MPX Connector	BNC UN-Balanced
MPX Level	From -6 to +12 dBm (rear panel ext. trimmer)
Mono Level	0 dBm; +6dBm; adj.(-6 to +12 dBm, rear panel)
Audio Filter Response	>30 dB (from 19KHz to 100 KHz)
THD	<0,2% from 40Hz to 15KHz
Suppression of 19 KHz	>46 dB
RDS Impedance	10 K Ohm unbalance ., BNC Connector (with 30 HZ to 100 KHz Filter)

STEREO SPECIFICATION

Left and right impedance	600 ohm/10 KOhm. XLRf Connector
Left, right level	0 dBm; +6dBm; adj.(-6 to +12 dBm, rear panel)
Crosstalk	>50 dB (@ 19KHz)
THD on Encoded channels	<0,3% from 0,4 Hz to 15 KHz
Suppression of 38KHz	>50 dB
Spurious suppression outside band	According to Limit ETSI EN 302 018
Sub Carrier Generation	Internal cristal
Pilot Frequency	19KHz \pm 1Hz

DESIGN DATA

Type	Solid state direct FM frequency
Pre-emphasis	Flat or 75 or 50 μ s
Audio Frequency Response	\pm 0,2 dB (from 40Hz to 10KHz) (stereo) \pm 0,3 dB (from 40 Hz to 100 KHz) (MPX)
Unbalance rejection	>40 dB
Modulation	Type: Direct VCO frequency modulation F3E/F8E Capability: Meets or exceeds all CE99/05 R&TTE Requirements
Digital Input	AES/EBU



SPECIFICATION	TX30	TX300
RF output power	From 0 to 30W	From 300W
Output Connector	N type female	N type female
Dimension (WxHxD) mm	2U 482x88x410	2U 482x88x480
Weight	7 Kg	10 Kg
Power Consumption	<100 W	<550 W
Power Factor	0.70	0.99
Power supply req.	From 80 to 265 Vac. Single phase	From 80 to 265 Vac. Single phase
Type of ventilation	1 blower 28 VDC	2 blowers 28 VDC

TEMPERATURE

Operating range	0° to 45°C
Storage range	-40° to 60° C
Maximum relative Humidity	90% non condensing
Max Operating Altitude	2500 mt.a.s.l.

STANDARD COMPLIANCE

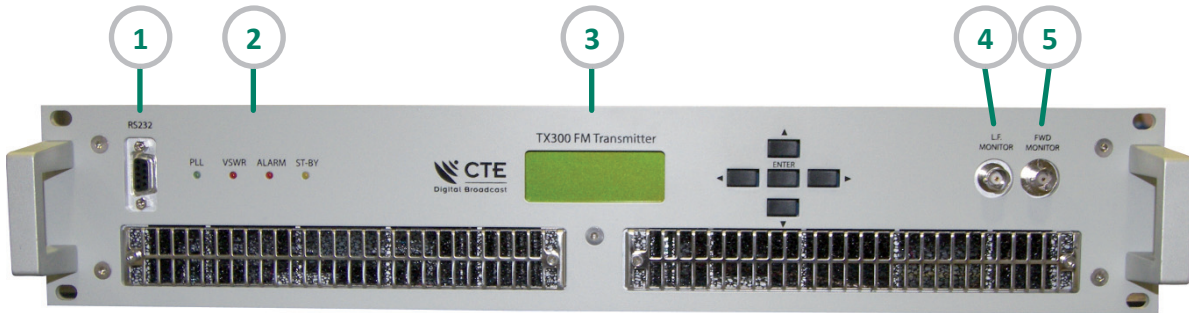
Conformity	Directive 99/5/CE
Radio Spectrum	ETS 302 018-2 V1.2.1
EMC	ETS 301 489-11 V1.3.1
Safety	EN 60215:1989; EN 60215/A1:1992-07; EN 60215/A2:1994-09;

REMOTE CONTROL

LAN	Web Browser by TCP/IP SNMP Protocol (RJ45)
RS232	Software Remote Controller by GSM Modem (DB9f)
RS485	Internal BUS connection for system connectivity (DB9 in&out)
Parallel TS & TC	2 x DB15 A I/O
Parallel Frequency Set	9 preset frequency activate by TC (DB15 Connector)

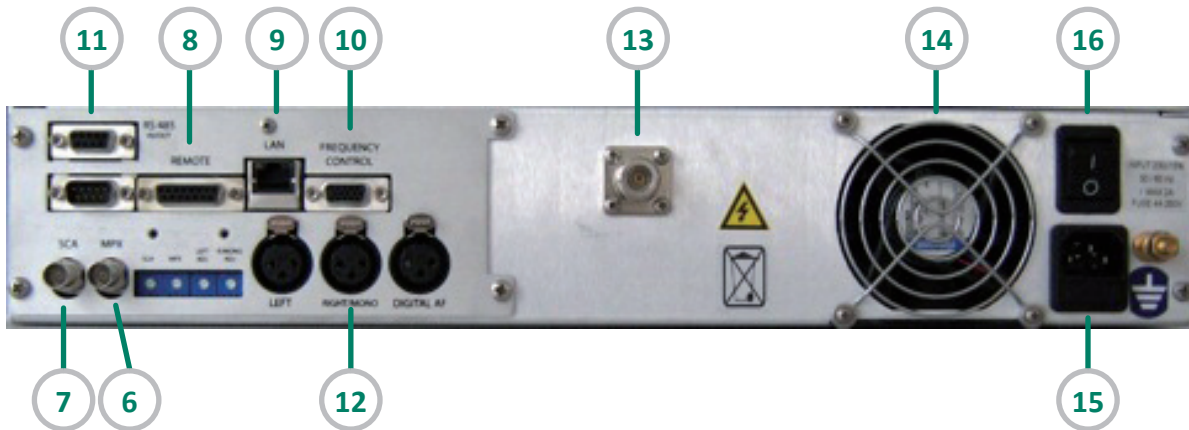


FRONT PANEL

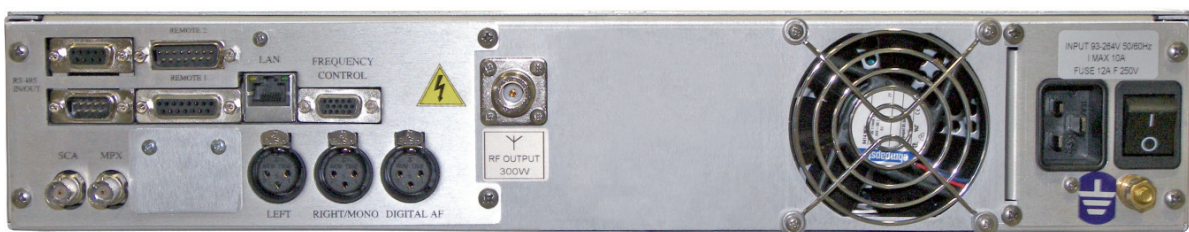


- 1. RS232 - Usable for software update
- 2. Status Leds
- 3. Control Panel
- 4. LF Monitor
- 5. FWD Monitor

REAR PANEL 30W



REAR PANEL 300W



- 6. MPX – input 1 for external RDS/SCA signal
- 7. SCA- input 1 for external mpx signal
- 8. Remote control
- 9. LAN – Ethernet standard
- 10. FREQUENCY CONTROL
- 11. RS485
- 12. External Input
- 13. Antenna N female output connector
- 14. Cooling
- 15. Power line plug-in FUSE
- 16. Power line Switch



TX30 & TX300

FM EQUIPMENT

CODE	MODEL	DESCRIPTION	OPTIONS
6003545048	TX30	30W Stereo, Mono MPX FM Transmitter	Option A
6003545049	TX30	30W Stereo, Mono MPX FM Transmitter	Option A+B
6003545050	TX30	30W Stereo, Mono MPX FM Transmitter	Option A+C
6003545051	TX30	30W Stereo, Mono MPX FM Transmitter	Option A+B+C
6003545052	TX300	300W Stereo, Mono MPX FM Transmitter	Option A
6003545053	TX300	300W Stereo, Mono MPX FM Transmitter	Option A+B
6003545054	TX300	300W Stereo, Mono MPX FM Transmitter	Option A+C
6003545055	TX300	300W Stereo, Mono MPX FM Transmitter	Option A+B+C

OPTION A:	Remote Control (TCP/IP; SNMP; RS232)
OPTION B:	Built in Digital AES/EBU Decoder
OPTION C:	DB25 Parallel port expansion for 1+1, N+1 system, ext C.U.