

TX 1 | 1000W
VL 1 | 1000W

TX 05 | 500W
VL 05 | 500W



THE TX 1 AND TX 05 ARE REALLY INNOVATIVE FM TRANSMITTERS WITH 1000W AND 500W OUTPUT POWER RESPECTIVELY. THANKS TO THE NEW SOLUTIONS THAT OUR ENGINEERS HAVE IMPLEMENTED IN THE CIRCUITRY AND TO THE COMPACT DESIGN, FOR THESE TRANSMITTERS WE HAVE ESTIMATED A 20% LONGER MTBF WITH RESPECT TO THE AVERAGE SIMILAR MODELS AVAILABLE IN THE MARKET.

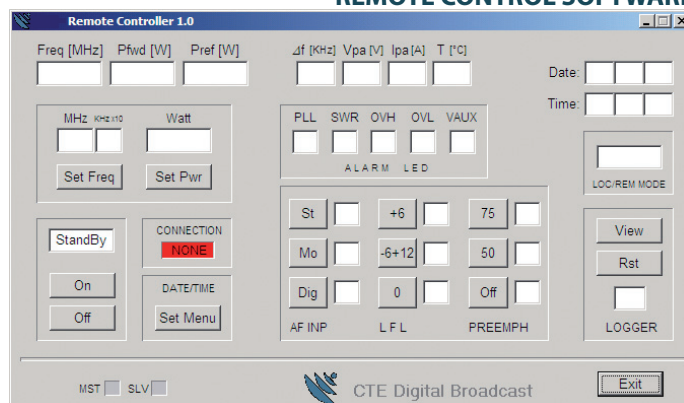
THE TX 1 AND TX 05 ARE EQUIPPED WITH A MICROPROCESSOR BOARD THAT ALLOWS THE PROGRAMMING FROM THE LOCAL DISPLAY OR EVEN REMOTELY, THROUGH A STANDARD RS232 OR SNMP. THANKS TO THE ULTIMATE ELECTRONIC COMPONENTS THAT HAVE BEEN LARGELY IMPLEMENTED IN THE DESIGN, ALSO THE RF SPECTRUM SPECIFICATIONS HAVE BEEN SIGNIFICANTLY IMPROVED.



THE EQUIPMENT COMPLIES WITH THE RTTE EUROPEAN REQUIREMENTS.

- ✓ SOLID STATE AMPLIFIER WITH MOSFET TECHNOLOGY.
- ✓ OUTPUT POWER ADJUSTABLE FROM 100W TO 1000W
- ✓ USER FRIENDLY FOR MONITORING AND CONTROL
- ✓ DOUBLE STAGE POWER SUPPLY
- ✓ FAST AND MULTIPLE PROTECTIONS
- ✓ COMPACT AND MODULAR DESIGN FOR QUICK AND EASY MAINTENANCE
- ✓ FLEXIBLE TELEMETRY SYSTEM AND REMOTE CONTROL
- ✓ N+1 HARDWARE AND SOFTWARE CONTROL FACILITY

REMOTE CONTROL SOFTWARE



CODE	MODEL	DESCRIPTION
0005310008	TX05	500 W Stereo, Mono, MPX Transmitter
0005310036	TX05	500 W Stereo, Mono, MPX Transmitter with option A&B
0005310009	TX1	1 KW Stereo, Mono, MPX Transmitter
0005310035	TX1	1 KW Stereo, Mono, MPX Transmitter with option A&B
0000130266	VL05	500 W Power Amplifier 87.5-108 MHz
0000130308	VL05	500 W Power Amplifier 87.5-108 MHz with option A
0000130267	VL1	1 KW Power Amplifier 87.5-108 MHz
0000130307	VL1	1 KW Power Amplifier 87.5-108 MHz with option A
Option and accessories		
0000170073	TC35	Kit GSM TC35 remote control FM equipment

» TECHNICAL DATA »

» FREQUENCY

Range	87,5 ÷ 108 MHz
Internal Setting mode	10 KHz steps
External Setting mode	10 KHz steps by remote control RS232-RS485
Generation	PLL synthesizer
Control	Microprocessor
Output frequency stability	± 300 Hz / 3 months
Reference	TCXO 12,8 MHz
Nominal deviation	± 75 KHz
Stability of Frequency Deviation	± 2,5 % over 6 months
Impedance RF Connector	50 Ohm

» RF OUTPUT SPECIFICATIONS

Harmonics suppression	< - 75 dBc
Spurious Emission	< - 90 dBc
Off Lock Attenuation	> 60 dBc
S/N RATIO (weighted)	> 73 dB (referred to ± 75 KHz)
THD	0,10%
VSWR	Less then 1,5:1
Probe	BNC connector RF – 40 dB BNC connector LF

» MONO MPX SPECIFICATIONS

Mono/MPX Impedance	600 Ohm bal. or 10 KOhm unbal., XLR female Connector
Mono Level	From - 6 to + 12 dBm
MPX Level	- 6 dBm
Audio Filter Response	> 30 dB (from 19 KHz to 100 KHz)
THD	< 0,2% From 40 Hz to 15 KHz
Suppression of 19 KHz	> 46 dB
RDS and SCA Impedance	10 KOhm unbal., BNC Connector (with 30 Hz to 100 KHz Filter)

» STEREO SPECIFICATIONS

Left, and Right Impedance	600 Ohm bal. or 10 KOhm unbal., XLR female Connector
Left, Right Level	From – 6 to + 12 dBm
Crosstalk	> 50 dB (@ 19 KHz)
THD on Encoded channels	< 0,3 % From 0,4 Hz to 15 KHz
Suppression of 38 KHz	> 50 dB
Spurious suppression outside band	According to ETSI 300-384
Sub Carrier Generation	Internal Cristal
Pilot Frequency	19 KHz ± 1 Hz

» DESIGN DATA

Type	Solid state direct FM frequency
Pre –emphasis	Flat or 75 or 50 µs
Audio frequency response	± 0,2 dB (from 40 Hz to 15 KHz) (stereo) ± 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 CE 99/ 05 R&TTE requirements
Digital Input	AES/EBU

» REMOTE CONTROL

LAN	WEB Broser by TCCP/IP SNMP Protocoll (RJ45)
RS232	Software Remote Controller by GSM Modem (DB9f)
RS485	Internal BUS connection for syste connectivity(DB9 in&out)
Parallel	A I/O DB15

» STANDARDS COMPLIANCE

Radio spectrum	ETSI 300-384; ETS 302-018
EMC	ETSI 300-447; ETS 301-489
Safety	EN 60950 - EN 60215

» 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.

» SPECIFICATIONS

	TX 1 / UL 1	TX 05 / UL 05
RF output power rms	From 100 to 1000 W	From 50 to 500 W
Output Connector	7/16 Type Female	7/16 Type Female
Dimensions (W x H X D) mm	482 x 132 x 700 (550 x 270 x 800 Package)	482 x 132 x 700 (550 x 270 x 800 Package)
Weight	18 Kg (20 Kg. Package)	17 Kg (19 Kg. Package)
Power consumption	Approx. < 1800 VA	Approx. < 900 VA
Nr. of power supplies	230 Vac±15%, single phase;	230 Vac±15%, single phase;
Number of fans	2 blowers 24 V dc	2 blowers 24 V dc