

new **TEX1000 LCD**

Preliminary Version



TEX1000 LCD Exciter

TEX1000 LCD *FEATURES*

- Digital user interface to diagnose and control all the parameters displayed (frequency, output power, measurement, etc...).
- Adjustable power output from 0 to 1000 W. On-air under any VSWR conditions thanks to Foldback control.
- Low cost with high performance
- Available with 2 SCA/RDS input connectors.
- Built-in stereo coder with high performance.
- Only 3HE.

Optionally TEX1000 LCD comprises:

- Fully integrated telemetry and SMS alarms with built-in GSM modem and battery for the battery charger

Stronger and Smaller: just 3HE!!!

New TEX1000 LCD exciter

Technical Specifications

Preliminary Version



Mechanical

Panel Dimension	483 mm x 132.5 mm (3 HE)
Depth	650 mm
Weight	33 kg
Operating Temperature	-10 °C + 50 °C

General

Left-Mono/MPX Input RF output power	0 to 1000 W, adjustable
RF output connector	7/8" Connector, 50Ohm
RF output impedance	50 Ohm
Frequency range	87.5 MHz ÷ 108 MHz, step 10kHz (it is possible to specify different steps at the moment of the order)
Frequency setting	Direct software programming
Frequency stability	±1ppm from -10°C to 50°C
Modulation type	Direct carrier modulation
Spurious and Harmonics suppression	Respects relevant FCC and CCIR standards (typical -75 dB)
Modulation capability	Respects relevant FCC and CCIR standards (typical 240kHz MPX/Mono, 210 KHz Stereo)
Asynchronous residual AM	< -65 dB wrt. 100% peak AM, without deemph.
Synchronous residual AM	< -55 dB wrt. 100% peak AM, with 75 kHz deviation @ 400Hz, without deemphasys
C.A. power supply	≅ 90 V ÷ 250 V, full-range Power Factor > 0,97 (with PFC)
Efficiency	Efficiency 65%

Inputs

Left-Mono/MPX Input	Type: XLR female balanced or unbalanced
Right /Mono Input	Type: XLR female balanced or unbalanced
MPX/SCA/RDS input	Type: BNC, unbalanced
Input impedance	600 or 10 k Ohm, XLR L/R/Mono 50 or 10 k Ohm, BNC MPX selectable via Dip-Switch
Input level	-20 dBm ÷ +13 dBm, continuously adjustable via trimmer
Preemphasys	Selectable: 0 50 us (CCIR) 75 us (FCC)
SCA1 & SCA2 input	2 BNC unbalanced connectors
SCA1 & SCA2 input impedance	10 kOhm
SCA1 & SCA2 input level	-20 dBm ÷ +13 dBm for 2.0 kHz continuously adj. via trimmer

Outputs

RF Out:	7/8"-type, 50 Ohm
RF Test	BNC connector, -60 dB wrt. the RF output, 50 Ohm
19 kHz pilot tone output	1 Vpp, minimum load 4.7 kOhm

MONO operation

	> 80dB wrt. 75 kHz, measured in the band 20 Hz ÷ 20 kHz, 50 us deemph., RMS detect
Amplitude frequency response	± 0.5 dB, 20Hz ÷ 15KHz
Total harmonic distortion (THD)	< 0.05%

MPX operation

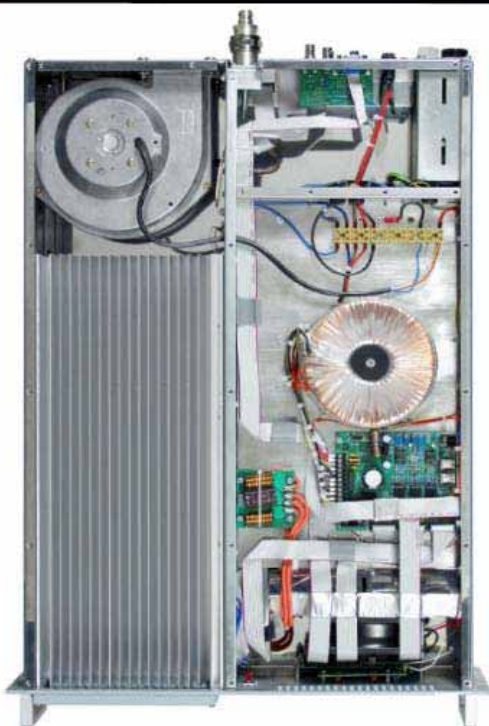
Composite S/N	> 80dB wrt. 75 kHz, measured in the band 20 Hz ÷ 20 kHz, 50 us deemph., RMS detect
MPX amplitude frequency response	± 0.05 dB, 20 Hz ÷ 53 KHz ± 0.2 dB, 53 KHz ÷ 100 KHz
MPX Total harmonic distortion (THD)	< 0.02 %
Stereo separation	> 55 dB (typ. 60dB, with external stereo coder)

Stereo operation (only TEX1000/s LCD)

S/N FM Stereo	> 72 dB wrt. 75 kHz, measured on decoded channels, in the band 20 Hz ÷ 20 KHz, 50 us deemph., RMS detector
Risposta ampiezza/frequenza audio	± 0.5 dB, 20 Hz ÷ 15 KHz (with preemphasis)
Total harmonic distortion (THD)	≤ 0.05 %
Stereo separation	> 50 dB (55 dB typical)

Connections

Interlock connector	BNC, inhibits the RF power output when shorted to ground
Serial interface	DB9 female RS232 DB15 female, give indications on the state of the device



These specifications can be subject to change without notice.