

# new **TEX1000 Light**

Preliminary Version



## **TEX1000 Light** *FEATURES*

- Professional performance, extreme compactness, lightness reliability and easy maintenance.
- Manufactured with the state-of-the-art technology, for a safe use and easy maintenance.
- Digital user interface to diagnose and control all the parameters displayed (frequency, output power, measurement, etc...).
- Adjustable power output from 0 to 1000 W. APC (Automatic Power Control) and foldback protection, safe and reliable operation in every environmental condition.
- PFC (Power Factor Corrector) power supply, for a maximum operation efficiency.
- Built-in stereo coder with high performance.
- Available with 2 SCA/RDS input connectors.
- High gain amplifier with a very low input power
- Perfectly interfaceable with all RVR telemetry systems, for an easy remote control of the operation parameters. Built-in GSM modem (Optional)
- Fully compliant with EC, FCC, CCIR standards.

*Stronger and Smaller: just 3HE!!!*

*New TEX1000 Light exciter*

# Technical Specifications

Preliminary Version



## Mechanical

Panel Dimension	483 mm x 132.5 mm (3 HE)
Depth	550 mm
Weight	25 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 (Opt. 7/16" upon request)
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 (Opt. 7/16" on demand)
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

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.