

# FM 5000W Broadcast Transmitter

Following the legendary line of FM transmitters ESVA, of which were built over 12,000 pieces, Suono Telecom now, continuing the tradition, introduce the new ESVB line, the best in our long 40 years of history of manufacturing Radio FM products.

In addition to the well-known quality and reliability, this new line has those features and functions considered indispensable in today's high class equipments, such as top energy efficiency, telemetry LAN, IP connection and N+1 configuration.



#### **KEY FEATURES**

- RET FEATURES

  Excellent audio performance

  Compact size in relation to the RF power

  Low power consumption

  Last generation of RF power devices

  Frontplane control and metering via HD Oled Display

  Parameters setting by only one rotary knob

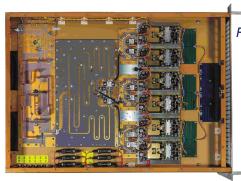
  Quick and easy to use and immediate learning menu

  IP Connectivity for anywhere access

  Quick and easy routine maintenance
- Oulick and easy routine maintenance
   High quality Stereocoder
   RDS Coder
   Telemetry via IP



slide-in power supply for easy maintenance



RF Power

Rear side



Frequency Range:	87.5÷108.00 MHz, [ 66÷74 MHz (OIRT), 76÷90 MHz (JPN)]
Type of Modulation:	Direct frequency modulation of carrier, F3E stereo and mono.
RF Output Impedance:	50 ohm.
RF Output Connector:	7/16"
RF Output setting:	10W step
VSWR:	1.5:1 Max with automatic fold-back VSWR prot. at all phase angles
Frequency Stability:	Internal TCXO ±2 ppm from -5 to +50°C (better on request)
Modulation Capability:	over ±200 KHz
Audio Inputs:	L&R analog balanced, Unbalanced composite, AES, SCA, RDS
Operator interface setting:	Encoder Push-Rotary
LCD Display:	Oled hi-definition graphic type
Frequency Control:	Synthesizer uprocessor controlled.
Programming step:	10 KHz increments
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..from 0 to 5000W continuously adjustable from front panel.

..N°2 RS485 ports RJ45 back panel Interface control: PC Interface: USB: ..... : USB: ......connector Type B female front panel .....RJ45 LAN connection with WEB-Server Telemetry:.. Monitor RF

..-10 dBm, BNC-F connector ..-80 dBc. ..Exceeds ETSI/CCIR/FCC requirements. Off Lock RF Muting: ..... RF Spurious: Exceeds ETSI/CCIR/FCC requirements. Preemphasis: ... ..Flat/50/75µs selectable from front panel.

Asynchronous AM S/N Ratio:....-65 dB below ref. 100% AM modulation @ 400 Hz. Synchronous AM S/N Ratio: ....-60 dB below ref. 100% AM mod. 400 Hz with FM 100%

AC Power Factor:...............0.95 typical at 220VAC Operating temperature: ......-10°C to +50°C. Max Operating Altitude: .....> 3000 mt. Relative Humidity Range: ......0 to 95% non condensing.

## MONAURAL PERFORMANCE

GENERAL

Power Output:

Operational Modes: .....Mono (L+R) Input Impedance: ......600 ohm or 10 Kohms balanced.

Input Level: .....-6 to +12 dBm in 0,5dB step (Other range on request)

Input Connector:.....XLR female - balanced. Audio Frequency Response:.....±0.15 dB, 30 Hz to 15 KHz.

Preemphasis setting:.....0, 50µS, 75µS Audio Filter Attenuation:.....< -55 dB @ 19 KHz, < -50 dB 20 KHz to 100 KHz

T H Distortion + Noise:....< 0.05% @ 400 Hz

.....better than -80 dB RMS ref. ±75 KHz 50µs deemphasis. FM S/N Ratio:....

## MULTIPLEX PERFORMANCE

Composite Input Impedance:.....600 ohm or 10 Kohms balanced. Composite Input Level:....-12 to +6 dBm in 0,5dB step (Other range on request) Input Connector:.....BNC female. AES/EBU Input Connector:.....BNC female Composite Response:.... .±0.2 dB, 30 Hz to 100 KHz. THDistortion + Noise:......0.05% @ 400 Hz Intermodulation Distortion:......0.05%, 1 KHz/1.3 KHz, 1:1 ratio FM S/N Ratio:..... ...... better than -80 dB RMS ref. ±75 KHz 50 μs de-emph. decoded.

## STEREO CODER PERFORMANCE

Audio Input Impedance:............600 ohm balanced, 15 Kohm unbalanced.
Audio Input Level:.....6 to +6 dBm in 0,5dB step (Other range on request) Input Connector:....XLR female. Audio Frequency Response:.....±0.15 dB, 30 Hz to 15 KHz. Preemphasis setting:.....0, 50  $\mu$ S, 75  $\mu$ S THDistortion + Noise:............0.05% @ 400 Hz Intermodulation Distortion:......0.05%, 1 KHz/1.3 KHz, 1:1 ratio FM S/N Ratio:....-80 dB RMS at ±75 KHz 50 µs de-emphasis. Pilot Frequency: ..... ..19 KHz ± 1 Hz ..-60 dB (typ. -70 dB) 38 KHz Suppression:.... 

## SCA-RDS 1&2 PERFORMANCE

Input Level:....-6 to +6 dBm in 0,5dB step (Other range on request) Impedance:.....10k ohms unbalanced .....BNC female

Crosstalk attenuation:.....Main to Sub -50 dB 30 Hz to 15 KHz below 100% Mod.

Amplitude Response:....+/- 0.1dB; 53Hz to 100kHz

## MECHANICAL/PHYSICAL

Height: ... 221 mm (5HE) Width: ..... ...... 19" (48.3 cm) EIA Rack Mount Depth: ...... 23" (605 cm) with connectors ...... 36 kg 78 lbs unpacked Weight:...