RADIO





MIZAR

FM Stereo Radio Transmitter

MAIN CHARACTERISTICHS:

- Availability of 30W,350W,500W and 1KW with extremely simplified wiring
- Repeatability of the performances, guaranteed by the completely mechanized assembling
- Good values of distortion and high S/N ratio
- Analogic telemetry signals available on DB9
- RS232 (or RS485) connection for remote control
- Automatic output power level control
- Control of all the functions via 2Rx16C display
- All the final stages with MOSFET technology
- A Stereo Coder can be integrated in the cabinet

The MIZAR FM Stereo Radio Transmitter is a reference point for the global market of FM Transmitters. The display on the front panel can indicate and change frequency, frequency step, forward and reflected power amplifier temperature, modulation level, alarms level, emphasis, remote enable. The rear panel contains XLR balanced inputs with input level controls, BNC for MPX output from internal stereo coder (if option is present), BNC for MPX input, 2 BNC for SCA operation. There is also a DB9 for wired external control and a DB9 for serial RS232 or RS485 (internally selectable) remote control. As far as audio performances are concerned, only one word is needed: "transparent". With a signal-to-noise ratio of 80dB,

the whole dynamic of the modern digital audio sources are reproduced with high fidelity.

With a crosstalk of 60dB (with stereo option) there is no chance to "misunderstand" the source of the signals.

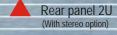
The RF output is via an N type

socket. Main input is via an EMI filtered IEC power connector. The power amplifier is based modern MOSFET device. A fresh air tunnel through the transmitter keeps cool air running right through the heatsink. The amplifier is protected from damage by temperature control systems and antenna fault (SWR) monitoring.

The switching-type power supply automatically adapts itself to any input voltage from 80 to 260V.









MIZAR

MODELS		
	30W	300W
MONO	MIZAR30	MIZAR300
STEREO	MIZAR30S	MIZAR300S

Technical characteristics

RF SECTION

Frequency Range, Frequency Step 87.5 - 108MHz, 10/50/100 kHz (from front panel) 87.0 - 108MHz China, other bands on request

Reference Stability ± 2.5ppm (0°C - 50°C) Nominal Output Power 30W / 350W / 500W / 1000W 0-100% (from front panel) Power Level

50Ω/N Female (30 AND 350W), DIN716 (500 AND 1KW) Output Impedance / Connector

RF Monitor Level / Connector -30dBc/BNC Off Lock Attenuation > 60dB Asynchronous AM S/N Ratio > 65dB Synchronous AM S/N Ratio > 60dB

Spurious and Harmonic Suppression Meets or Exceeds all FCC and CCIR requirements Meets or Exceeds all FCC and CCIR requirements

Modulation Capability

AUDIO SECTION

MPX OPERATION Audio Input Impedance 10kΩ **Audio Input Connector BNC**

Audio Input Level 2Vpp Nominal (±6dB adjustable from rear panel)

Frequency Amplitude Response ± 0.2dB 30Hz-100kHz

Harmonic Distortion < 0.1% 30Hz-100kHz (0.05% 20Hz-53kHz)

S/N Ratio with CCIR Unweighted > 73dB S/N Ratio with CCIR Weighted > 73dB

MONO OPERATION Audio Input Impedance Balanced $600\Omega/10k\Omega$ (jumper)

Audio Input Connector

Audio Input Level 2Vpp Nominal (±6dB adjustable from rear panel)

Frequency Amplitude Response ± 0.5dB 30Hz-15kHz Harmonic Distortion < 0.05% 30Hz-15kHz

Pre-emphasis Flat, 50µs, 75µs (ON/OFF from display, 50/75 from jumper)

S/N Ratio with CCIR Unweighted Filter S/N Ratio with CCIR Weighted Filter >73 dB

INTERNAL CODER OPERATION (Stereo Coder Option)

Audio Input Impedance Balanced $600\Omega/10k\Omega$ (jumper)

Audio Input Connector

Audio Input Level 2Vpp Nominal (±6dB adjustable from rear panel)

MPX Output Connector / Impedance BNC / 50Ω MPX Output Level 5.6Vpp

Frequency Amplitude Response ± 0.5dB 30Hz-15kHz

Harmonic Distortion < 0.05% 30Hz-15kHz

Pre-emphasis Flat, 50μs, 75μs (ON/OFF from display, 50/75 from jumper)

Stereo Separation > 50dB (typ. 60dB) 30-15kHz

S/N Ratio with CCIR Unweighted Filter > 70 dBS/N Ratio with CCIR Weighted Filter > 70 dB

SCA OPERATION (2 Inputs)

10kΩ SCA Input Impedance SCA Input Connector **BNC**

Input Level 2Vpp Nominal for ± 7.5kHz deviation

Frequency Amplitude Response ± 0.2dB 40-100kHz

AUXILIARY SOCKETS

RS232/RS485 (internally selectable) Serial Interface Forward, Reflected, Alarm and On/Off control Telemetry

GENERAL

AC Power Requirements 80 - 260V_{AC} 50/60Hz Dimensions / Weight Rack 19" 2U-6kg (30W) 3U-11kg (300W) Ambient Temperature Range -5°C to +45°C



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