



RFE

MAKING
BROADCAST
SMARTER

RM500

FM RADIO MONITOR





RM500 - FM Radio Monitor



PRODUCT DESCRIPTION

The RM 500 provides analog, AES3-digital and AoIP-streaming audio outputs. The Web Interface enables remote tuning, streamed audio, station switching, alarms, and more.

Multiple stations can be sequentially monitored using the programmable StationRotation™ feature. The RM 500 includes a built-in BandScanner™, a real-time clock and full SNMP functionality.

The RM 500 also delivers important RF and audio signal measurements and dispatches email or text-message alarms for out-of-limits conditions and other reception errors.

MAIN FEATURES

- Fulltime off-air program audio and analog FM via the Web from anywhere in the world.
 - Up to 10 listeners at once stream support.
 - Front-panel alarms and/or rear-panel GPO indicate Audio Loss, Low Signal, RDS Errors, and FM Reception Loss .
 - Easy front-panel setup by menu navigation.
 - Local and remote readout of all pertinent FM/RDS data.
 - Enhanced alarm logging
 - Built-in BandScanner displays a spectrum plot of the entire FM band.
 - OLED hi-res graphic display, wide-range LED level meters in 1HE rack-unit.
 - SNMP utility is fully supported.
 - Real-Time Clock.
 - AES67-compatible
- [selectable] AoIP utility has independent IP, Audio Format and Transmit Flow settings [optionally].





RF	Tuning Range	87.5MHz to 107.9MHz in 100kHz steps.
	Antenna Input	75Ω (BNC).
	Sensitivity/SNR	10dBμV required for 50dB mono-FM S/N.
	Audio Response	FM: ±1dB, 30Hz – 15kHz; de-emphasis is programmable at 75μs or 50μs or OFF.
	Reception Modes	FM: Stereo / Stereo Auto-Blend / Forced-Mono.
	RDS Fields Displayed	PS, PI (and call), RT, RT+1, RT+2, PTY, PTYN, C/T, M/S, DI, TP, TA; RDS Block Error Rate, Groups Transmitted (with use statistics), AF, ODA.
AUDIO	Graphs and Metering	L, R, L+R and L-R Program Audio; Audio Histogram; RSSI, RF SNR, HD Level and Cd/No levels and histograms.
	Program Audio Outputs	Balanced Analog (XLR) Left and Right outputs are adjustable from -15dBu to +15dBu in 0.1dB steps. AES Digital (XLR) output at 44.1kHz or 48kHz is adjustable from -30dBFS to 0dBFS in 0.1dB steps. Headphone Jack (3.5mm TRS) has adjustable listening level. Built-in 2x10W Stereo Speaker with Volume control
	Streaming Audio	MP3 or OGG (selectable) streams have bitrates from 32kbps to 256kbps and sampling rates from 16kHz to 48kHz.
	ALARMS	
ALARMS	Audio Loss	Alarm responds to the monitored service (FM or HD Radio). Alarm On/Off thresholds and Time On/Off intervals are programmable.
	Low Signal	Alarm and reset trigger levels are independently adjustable relative to the FM carrier level display and have programmable Time On/Off timings.
	RDS Alarm	Programmable Time On/Off for RDS Loss or PI Error.
	Pilot Loss	Programmable Time On/Off for loss of Stereo Pilot.
	Alarm 'Tallies'	Individual open-collector NPN transistor outputs to ground are programmable for logic polarity and GPO assignment.
	AoIP Port	AES67-compatible (selectable) AoIP utility has independent IP, Audio Format and Transmit Flow settings.
NETWORK INTERFACES	LAN Port	LAN connection to local network or Internet provides remote monitoring; user-programmable network setup and streaming parameters.
MISCELLANEOUS	Real-Time Clock	Auto-sets to Internet time; auto/manual DST setting, battery backup.
MECHANICAL	Size (LxDxH)	48x15x4.1[H] cm
	Weight	3 Kg
	Mounting Options	An optional rack adapter mounts one or two half-rack modules in a 1U, 19-inch rack space.
ELECTRICAL	Voltage	90-240Vac ± 20%
	Current	100 mA max.
	Connector type	IEC-C13/C14
	Fuse	500mA delayed
ENVIRONMENTAL	Operation Range Temperature	0°C-50°C
	Relative Humidity	0-95%
	Altitude	to 10,000ft/3,048m

