



# 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.
- Dante®-based, AES67-compatible [selectable] AoIP utility has independent IP, Audio Format and Transmit Flow settings [optionally].





<b>RF</b>	<b>Tuning Range</b>	87.5MHz to 107.9MHz in 100kHz steps.
	<b>Antenna Input</b>	75Ω (BNC).
	<b>Sensitivity/SNR</b>	10dBμV required for 50dB mono-FM S/N.
	<b>Audio Response</b>	FM: ±1dB, 30Hz – 15kHz; de-emphasis is programmable at 75μs or 50μs or OFF.
	<b>Reception Modes</b>	FM: Stereo / Stereo Auto-Blend / Forced-Mono.
	<b>RDS Fields Displayed</b>	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.
<b>AUDIO</b>	<b>Graphs and Metering</b>	L, R, L+R and L-R Program Audio; Audio Histogram; RSSI, RF SNR, HD Level and Cd/No levels and histograms.
	<b>Program Audio Outputs</b>	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
	<b>Streaming Audio</b>	MP3 or OGG (selectable) streams have bitrates from 32kbps to 256kbps and sampling rates from 16kHz to 48kHz.
	<b>ALARMS</b>	
<b>ALARMS</b>	<b>Audio Loss</b>	Alarm responds to the monitored service (FM or HD Radio). Alarm On/Off thresholds and Time On/Off intervals are programmable.
	<b>Low Signal</b>	Alarm and reset trigger levels are independently adjustable relative to the FM carrier level display and have programmable Time On/Off timings.
	<b>RDS Alarm</b>	Programmable Time On/Off for RDS Loss or PI Error.
	<b>Pilot Loss</b>	Programmable Time On/Off for loss of Stereo Pilot.
	<b>Alarm 'Tallies'</b>	Individual open-collector NPN transistor outputs to ground are programmable for logic polarity and GPO assignment.
	<b>AoIP Port</b>	Dante®-based, AES67-compatible (selectable) AoIP utility has independent IP, Audio Format and Transmit Flow settings.
<b>NETWORK INTERFACES</b>	<b>LAN Port</b>	LAN connection to local network or Internet provides remote monitoring; user-programmable network setup and streaming parameters.
<b>MISCELLANEOUS</b>	<b>Real-Time Clock</b>	Auto-sets to Internet time; auto/manual DST setting, battery backup.
<b>MECHANICAL</b>	<b>Size (LxDxH)</b>	48x15x4.1[H] cm
	<b>Weight</b>	3 Kg
	<b>Mounting Options</b>	An optional rack adapter mounts one or two half-rack modules in a 1U, 19-inch rack space.
<b>ELECTRICAL</b>	<b>Voltage</b>	90-240Vac ± 20%
	<b>Current</b>	100 mA max.
	<b>Connector type</b>	IEC-C13/C14
	<b>Fuse</b>	500mA delayed
<b>ENVIRONMENTAL</b>	<b>Operation Range Temperature</b>	0°C-50°C
	<b>Relative Humidity</b>	0-95%
	<b>Altitude</b>	to 10,000ft/3,048m

