



INSTRUMENT AND RADIO CORPORATION

RMM1 PathFinder Series Mobile Radio

FEATURES

- 54-60 MHz or 66-88 MHz or 135-174 MHz Wide Band Self Tuning
- 200 Channel with 24 character alphanumeric identifiers defined by Group
- Trunk / Under seat Mount with Remote Head for ease of installation
- User Selectable Scan / Priority Scan / ACS / Nuisance Channel Delete
- Last caller alphanumeric identification
- Split frequency CTCSS / split code DCS / 5-Tone ANI, Page & Mute facility
- 100 predefined easy access 5-Tone calls with alphanumeric identifiers
- Emergency multiple call facility with dedicated button
- Automatic Channel Select (ACS) for automatic access to repeater channels
- Remote Outstation control and RS232 Data Port for PC Control
- User group packaged Short Message Service
- Single PC Board maintenance friendly

ETSI SPECIFICATION



RM SERIES MOBILE RADIO

Technical Specification

	MID BAND	HIGH BAND
MODEL DESIGNATOR	M1	H1
GENERAL		
Frequency Range	66-88 MHz	135-175 MHz
Frequency Control	Synthesized	
Frequency Stability	5ppm	
Channel Capacity	200 (splittable into up to 10 groups) TATN ACS Available, 10 ACS channels/group	
Channel Spacing	12.5 KHz	
TX and RX Frequencies	Anywhere in band	
Primary Input Voltage	13.2V	
Squelch Capability	Carrier, CTCSS, DCS, 5 Tone	
Temperature Range	-10 to +60 deg C	
Dimensions - Radio	150 X 132 X 41 mm	
- Control Head	132 X 55 X 22 mm	
Weight	Radio : 1kg, Control Head : 150 grams	
Antenna Type	Whip, dipole etc.	
Microphone	Dynamic	
Speaker	External 5W 16 Ohm	
TRANSMITTER		
RF Output	30W / 50E	
Transmitter Current	< 5A	
Modulation	Phase (16Kof3E)	
Modulation Distortion	< 5%	
Audio Response	300 - 3000 Hz (+1 -3 dB) pre emphasized 6dB / Oct	
FM Noise / Angle Modulation Hum & Noise	-40dB (-34dB / 12,5KHz channel spacing)	
Spurious & Harmonics	-56dBW	
Channel Frequency Spread	Total Band (limited by antenna)	
Maximum Frequency Deviation	2.5 KHz Adjustable	
Adjacent Channel Power	< -65dBc @ 12,5 KHz	
Carrier Attack Time	< 70mSec	
Time Out Timer	Programmable 0 - 240 Sec	
RECEIVER		
Sensitivity	0.25 uV (12dB SINAD EIA) typical 0.50 uV (20dB SINAD ETS) typical	
Audio Response	300 - 3000 Hz (+1 -3dB de-emphasized 6dB/Oct)	
Audio Output	> 5W @ 10% distortion	
Hum & Noise	-38dB / 12,5KHz -45dB / 25 KHz	
Squelch / Mute	Adjustable via Control Head	
Modulation Acceptance	> 5KHz	
Adjacent Channel Selectivity	> -70dB / 25 KHz > -65dB / 12,5 KHz	
Intermodulation	> -65dB	
Spurious Rejection	> -70dB	
Channel Frequency Spread	Total Band per Model	
Co Channel Rejection	8dB	