

KF510 Series

VHF/UHF PMR and MPT1327 Trunked Base Stations

The **KF510** series of base stations are rugged, reliable fixed base units for trunked and conventional applications. The transmitters are rated for continuous operation at full power and the receivers are designed for optimum performance in the strenuous, large signal environment of shared sites. The base station incorporates a fully flexible logic controller easily upgradeable (within the 2U 19 inch housing) from standard PMR local/remote operation through to the sophisticated enhanced Keynet 2 and Keynet 3 series of MPT1327 speech and data systems.



Microphone



KF510 Rear view

KF510 Features

- Standard 2U 19 inch rack mount or desk mount for local or remote operation
- Frequency ranges from 30MHz to 520MHz
- Standard versions: Full PMR for local/remote operation
PMR upgradeable to Keynet 2 MPT1327 operation
with Base Stations designed for fully featured multi-site systems, or to Keynet 3 MPT1327 Base Station for single site operation with expandable features and integral telephone connect option
- Range of continuous RF power outputs from 1 to 50W
Separate Tx and Rx antenna connectors
- Signaling options include CTCSS, DCS, 5-tone, DTMF and MPT1327 trunking
- LCD status display with 4 lines of 16 characters
- 12.5 or 25kHz channel spacing, programmable
- Front facing speaker and full keypad
- PC programmable
- CTCSS and DCS programmable for each channel
- Option of 2 receiver bands for reverse frequency operation
- Built-in alarm monitoring
- OEM versions for specialised data and other applications
- PS500 series power supply available

Part of the Key branded range of PMR and MPT1327 Base Stations, Mobiles and Portables manufactured by Radio Systems Limited



Radio Systems Limited

KF510 Series

VHF/UHF PMR and MPT1327 Trunked Base Stations specifications

General					
Frequency Range					
	30 MHz Band	80 MHz Band	150 MHz Band	200 MHz Band	400 MHz Band
	03A: 29.5-35 MHz 03B: 35-42 MHz 03C: 42-50 MHz	08A: 66-78 MHz 08B: 74-88 MHz	15A: 136-156 MHz 15B: 150-174 MHz	20A: 176-210 MHz 20B: 200-230 MHz 20C: 225-255 MHz 20D: 270-300 MHz	40SA: 300-335 MHz 40A: 335-370 MHz 40B: 365-400 MHz 40C: 400-435 MHz 40DS: 420-455 MHz 40D: 440-475 MHz 40E: 465-500 MHz 40F: 485-520 MHz
Number of channels	99 channels, selectable from the front panel, 128 channels accessible at rear connector				
Channel spacing	12.5 or 25kHz programmable				
Mode of operation	Full duplex, semi-duplex or simplex				
Modulation mode	FM (F3E)				
Antenna impedance	50 Ohms unbalanced				
Power supply	13.6V DC, negative ground, 12A at 50W transmitter output 110 VAC, 220/240 VAC PS500 series power supply unit available				
Environmental conditions	Operating temperature -30°C to +60°C Relative humidity 95% at 35°C				
Frequency stability	+/- 1 kHz				
Dimensions and weight	482mm wide x 88mm high x 380mm deep 11kg weight				
Approval specifications	ETS 300 086, ETS 300 113				
Signaling options	5 tone, CTCSS, DCS, DTMF, MPT1327 Integral trunked system controller				
Display	LCD dot matrix display (4 lines of 16 characters)				
Transmitter					
RF power output	1 to 50W				
Maximum frequency deviation	Wide band +/- 5 kHz Narrow band +/- 2.5 kHz				
Spurious and harmonics	Less than 0.25µW				
Signal to noise ratio	Wide band: 50dB at 1 kHz, 70% modulation Narrow band: 45dB at 1kHz, 70% modulation				
Modulation distortion	Less than 3% at 1 kHz, 70% modulation				
600 Ohm line input	-30 to + 10dBm				
Receiver					
Sensitivity	Less than 0.4 µV pd for 20dB noise quieting Less than 0.3 µV pd for 12dB SINAD				
Squelch sensitivity	Less than 0.25 µV				
Selectivity	More than 70dB at 25 kHz point				
Audio distortion	Less than 6% at 1 kHz, 70% modulation				
600 Ohm line output	-30 to +10dBm				
Blocking attenuation	More than 90dB				
Intermodulation attenuation	More than 70dBm				
Spurious response attenuation	More than 70dBm				
Signal to noise ratio	Wide band: more than 50dB at 1 kHz, 70% modulation Narrow band: more than 45dB at 1 kHz, 70% modulation				
These typical specifications have been prepared for worldwide markets and due to constant technological developments and changes, Radio Systems Ltd reserves the right to vary these specifications without notice.					



S500 Mains Power Supply

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