

KM4000 Series

VHF/UHF PMR and MPT1327 Trunked Mobile Radios

The **KM4000** mobile radio series provides a full range of PMR and trunked features. Available in many speech and dedicated data versions, in frequency bands from 66MHz to 480MHz, this series is designed for all speech and data applications.



The **KM4000** radios are user friendly, totally suitable for both simple and sophisticated solutions. GPS receiver option provides vehicle position information, with 2 serial ports and the MPT1327 FFSK or high speed GMSK modems available for data transfer. Full PMR options include selcall with up to 16 digit encode/decode, display of incoming identity, CTCSS, DCS and DTMF. Radios can be disabled remotely.

The **KM4000** series has a large text display and can be controlled by a simple speaker/microphone with up/down buttons, or a full keypad microphone and separate loudspeaker.

MPT1327 Trunking Features

- Speech and data calls with text display
- Individual, group and broadcast calls, PABX and PSTN calls
- Full keypad option and short code dialing with last number redial
- Priority, emergency and conference calls
- Call diversion
- Unattended call-back mode
- User memories for storing personal numbers
- Incoming call identification
- Unanswered call stacking
- Call time indicator and dynamic call timing
- Dynamic on-air regrouping
- Status interrogate, status messages with text display
- Message pager facility
- Alarm facilities including silent alarm
- 2 data ports for peripherals and portable data collection applications at 4800 baud
- Open channel facility for non-trunked operation, with CTCSS if needed
- Up to 1024 channels
- Full control of radio operation via RS232 port for enhanced dispatcher operation
- Choice of MPT1343 or other numbering systems

Pease read the KM4000 Features brochure to appreciate the full range of functionality that the KM4000 supports

General & PMR Features

- Large text display with speaker/microphone or keypad microphone
- Available in frequency bands from 66MHz to 480MHz
- Option for directly connected external NMEA GPS receiver
- Dedicated data radio modem options, with or without speech
- Blank front options for integrated data or speech systems
- Compatible with KEY AVL map display system
- Standard versions:
 - Full PMR operation
 - Standard trunked operation with AVL
 - Enhanced data with fast GMSK modem
 - Speech and data integrated radio modems
 - Data modems with sensor inputs
 - OEM custom radios
- Options for 5-tone selcall, CTCSS, DCS, DTMF and FFSK signaling, with 4800 baud GMSK modem
- Automatic Number Identification (ANI)
- Self diagnostics
- Up to 1024 channels
- Speech privacy option
- Can be disabled remotely
- Installation kit includes a compact reversible mounting bracket

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



Radio Systems Limited

KM4000 Series

VHF/UHF PMR and MPT1327 Trunked Mobile Radios specifications

General				
Frequency Range				
	80 MHz Band	150 MHz Band	200 MHz Band	400 MHz Band
	08:66-88MHz	15A:136-162 MHz	20A:176-208MHz	40C:400-440 MHz
		15B:146-174 MHz		40D:440-480 MHz
Number of channels	Up to 1024			
Channel spacing	12.5 or 25 kHz available			
Dimensions	120mm wide x 45mm high x 180mm deep			
Specifications	ETS 300 086, ETS 300 113, ETS 300 279			
Display	LCD 2 lines of 16 characters, one of which can be used to show scrolling messages			
Signaling options	5 tone, CTCSS, DTMF, MPT1327/1343 trunking and other standards			
Data capabilities	SDM1, SDM2, NPD; integral 1200/2400 baud modem			
	RS232 program/data port operating at 4800 baud			
	GMSK fast data modem option			
Options	Interfacing to simple speaker/microphone or full keypad microphone			
	External GPS receiver			
	Full PMR, MPT1327 trunked, and data only radio modems			
	Radio modems with input lines for alarm sensors			
Transmitter				
RF power output	High/low 25/6W			
Maximum frequency deviation	12.5 kHz spacing: +/- 2.5 kHz			
	25 kHz spacing: +/- 5 kHz			
Frequency stability	+/- 3ppm			
Frequency response	Within +1/- 3dB of 6dB/octave pre-emphasis from 0.3 to 3kHz, 1 kHz reference			
Signal to noise ratio	More than 40dB at 1 kHz, 60% modulation			
Modulation distortion	Less than 3% at 1 kHz, 60% modulation			
Other parameters	As ETS 300 113			
Receiver				
Intermediate frequency	1st IF: 45 MHz, 2nd IF: 455 kHz			
Sensitivity	Less than 0.4 μ V pd for 20dB noise quieting			
	Less than 0.3 μ V pd for 12dB SINAD			
Squelch sensitivity	Less than 0.25 μ V			
AF response	Within +1/- 3dB of 6dB/octave pre-emphasis from 0.3 to 3kHz, 1 kHz reference			
AF distortion	Less than 5% at 1 kHz, 60% modulation			
Signal to radio noise	More than 40dB at 1 kHz, 60% modulation			
Other parameters	As ETS 300 113			
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.				



KM3000 & Power Unit



External Loudspeaker



Alternative Microphones