Standard Accessories

Palm Microphone SM16A1	Microphone Hanger and Screws	Mounting Bracket Kit	Fuse	Power Cord

Optional Accessory

External Speaker SM09D1	Desktop Microphone SM10A1	Programming Cable (USB Port) Pc37	Data Cable	320W External Power Supply	Antenna for Mobile Radio	Palm Microphone with Keypad	GPS Mounting Kit

Specifications

General

Frequency Range	400-470MHz
Channel Capacity	256
Zone Capacity	32 (each with a maximum of 16 channels)
Channel Spacing	25 /20/12.5 KHz
Operating Voltage	13.6±15%
Standby (Max.)	0.6A
Receive (Max.)	2.0A
Transmit (Max.)	12A (5-45W) / 8A (5-25W)
Frequency Stability	±1.5ppm
Antenna Impedance	50Ω
Dimensions (W*H*L)	174 X 60 X 200 mm / 6.9*2.4*7.9 inch
Weight	1.7 Kg /60 oz
Military Standard	MIL-STD-810C/D/E/F
ESD	IEC-801-2KV
Front Case	PC+ABS
LCD Display	220*176 pixels, 262000 colors

(Current Drain covers Standby, Receive, and Transmit rows)

Receiver

Sensitivity (Analog)	0.3μV (12dB SINAD) 0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
Sensitivity (Digital)	0.3uV/BER5%
Adjacent Channel Selectivity TIA603 ETSI	65dB @ 12.5 kHz /75dB @ 20 & 25 kHz / 60dB @ 12.5 kHz /70dB @ 20 & 25 kHz
Intermodulation TIA603 ETSI	75dB @ 12.5/20/25 kHz / 70dB @ 12.5/20/25 kHz
Spurious Response Rejection TIA603 ETSI	75dB @ 12.5/20/25 kHz / 75dB @ 12.5/20/25 kHz
S/N	40dB @ 12.5 kHz / 43dB @ 20 kHz / 45dB @ 25 kHz
Rated Audio Power Output	3W
Rated Audio Distortion	≤3%
Audio Response	+1 ~ -3 dB
Conducted Spurious Emission	-57 dBm

Transmitter

RF Power Output	Low Power: UHF1 (400-470MHz), 5-25W; High Power: UHF1 (400-470MHz), 5-45W;
FM Modulation	16KΦF3E @ 12.5 kHz / 14KΦF3E @ 20 kHz / 11KΦF3E @ 25 kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD / 12.5kHz Data & Voice: 7K60FXE
Spurious and Harmonics	-36dBm<1GHz / -30dBm>1GHz
Modulation Limiting	±2.5kHz @ 12.5 kHz / ±4.0kHz @ 20 kHz / ±5.0kHz @ 25 kHz
FM Noise	40dB @ 12.5 kHz / 43dB @ 20KHz / 45dB @ 25 kHz
Adjacent Channel Power	60dB @ 12.5 kHz / 70dB @ 20/25KHz
Audio Response	+1 ~ -3 dB
Audio Distortion	≤3 %
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1, 2&3

Environmental Specifications

Operating Temperature	-30℃ ~ +60℃
Storage Temperature	-40℃ ~ +85℃
Dust & Water Intrusion	IP54 Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F Standards
Humidity	Per MIL-STD-810 C/D/E/F Standards

All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

Applicable Military Standards 810 E/F

MIL-STD	810E Method	810E Procedure	810F Method	810F Procedure
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A, I/C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.3	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

Your Authorized Dealer:

MD782

Digital Two-Way Radio

Fully compliant to DMR standard, the MD782 always keep users well-informed in various scenarios with versatile functions. The MD782 offers a solution of efficient real-time digital communication and fleet management while using an ergonomic design and a user-friendly interface. The MD782 is your way of optimizing your organization's efficiency on the job.

DMR DMR standard

Additional Features ››

Versatile Voice Calls
Intelligent signaling of MD782 supports different types of voice calls, including Individual Call, Group Call and All Call.

Messaging
MD782 is can transmit and receive text messages.

Scan
This function allows you to listen to communication activities on other channels so that you can keep a close track of your team members.

DM & RM Operation Modes
RM: radios can communicate with each other via a repeater.
DM: radios can communicate with each other directly.

IP Service*
Multiple IP functions can be accomplished when MD782 is connected to the PC via an IP address.

Multiple Signaling Available
MD782 supports 2-Tone*, 5-Tone*, HDC1200* and CTCSS / CDCSS.

12.5 /20 /25kHz Channel Spacing
Programmable on a per channel basis to comply with different countries frequency allocations.

Emergency
MD782 is equipped with multiple emergency alarm methods such as Man Down and Silent Emergency, enabling you to get instant help in the case of a critical event.

High Power Sound Output
The MD782 has high power audio output with a built-in 5 Watt loudspeaker.

Telemetry & Telecontrol*
MD782 can achieve remote data acquisition and processing via an external sensor.

Software Upgradable
With this feature, you can enjoy additional functions and upgrades without having to buy a new radio.

*Indicates functions available in later version.

Product Highlights ››

Superior Voice
With the combined application of narrowband codec and digital error-correction technology, the MD782 ensures better audio quality across a wider coverage area.

Dual Modes (Analog & Digital)
The MD782 operates in either analog or digital mode, and is compatible with analog systems currently in use, allowing organizations to easily migrate to the digital era.

High Frequency Spectrum Efficiency
Benefitting from TDMA technology, MD782 allows twice the number of users to share the same channel. This is a huge relief on increasing shortages in spectrum resources.

Secure Communication*
The MD782 is furnished with an enhanced digital encryption capability. Eavesdropping issues are no longer a problem now that your communications are fully secured.

Reliable Quality
The MD782 is strictly compliant to MIL-STD-810 C/D/E/F as well as IP54 standards and is fully reliable in harsh environments.

Intuitive Interface & Button Design
The MD782's high definition color LCD provides outstanding visibility outdoors and in bright environments. Its large keypad and six ergonomically designed programmable keys allow for efficient and productive communications.

Versatile Functions
In addition to conventional communication functions, the MD780 features versatile digital and optional functions such as Messaging, GPS Dispatching*, Data Transmission* and Connection Alert.

Expansion Port
The MD782 allows for further development of additional functions using a reserved expansion port.

Mechanical Design Features ››

- 2.0" High-Definition Color LCD
- Large Volume Knob for Easy Use
- Professional Visually Appealing Design
- Innovative Ring-Shaped LED w/ Clear Status Updates
- Efficient Heat-Sink Capability Prevents Overheating
- Rugged Palm Microphone with Durable Audio Connector
- Six Programmable Keys