





**super  
mobile  
246**  
Higher Efficiency,  
Richer Experience

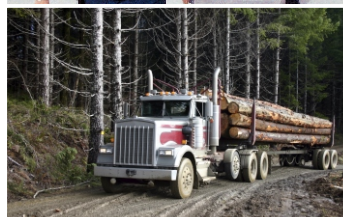
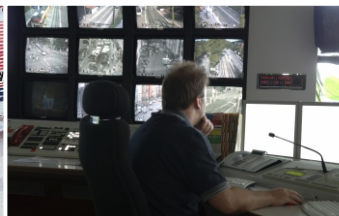
As a product built to the DMR standard, super mobile246 is endowed with ergonomic design, all-round functions and remarkable quality to increase your management efficiency and enable you to be responsive to emergent situations.

## Applications

Public Safety  
Forest Industry

Public Utilities  
Business

Transportation (port, airport, railway, etc.)  
Manufacturing



## Product Features

### ● User-centered Design

The large-size color display allows good visibility even under extremely strong light. And the seven programmable keys facilitate your communication in various conditions.

### ● Reliable Quality

super mobile246 is strictly compliant with MIL-STD-810 C/D/E/F/G and IP54 standards, ensuring outstanding performance even under harsh environments.

### ● Superior Voice

With the combined application of narrowband codec and error-correction technologies, super mobile246 is capable of ensuring you superior voice under noisy environments or at the edge of the coverage area. In addition, the adoption of the AGC technology also optimizes your voice. With a built-in 4W speaker, super mobile246 ensures clear and crisp voice communication.

### ● Higher Spectrum Efficiency, Higher Channel Capacity

Benefiting from the TDMA technology, super mobile246 allows twice the channels based on the same spectrum resource. This is a big help to relieve the stress of increasing shortage in spectrum resource.

### ● Dual-slot Pseudo Trunk

With this feature, the free slot can be allocated to a member that needs to communicate, effectively enhancing frequency efficiency and allowing you to communicate timely under emergency situations.

### ● Secure Communication

Besides the intrinsic encryption of the digital technology, super mobile246 provides enhanced encryption capability (such as 256-bit encryption algorithm) and the Scrambler feature (selectable).

### ● Versatile Services

In addition to conventional communication services, super mobile246 features rich data services and selectable functions such as Text Message, Scan, Emergency, Channel Steering, Auto Registration and Lone Worker.

### ● Further Development Port

The reserved front and rear port in super mobile246 allows users or any third party partner to further develop other helpful applications to extend the radio functionalities!

### ● Option Board Interface

super mobile246 supports option board interfaces to radio, allowing third party partner to develop various applications to interconnect with radios to control the radio to expand its functionalities! Among the supported features are voice recording, encryption etc. Please refer to the API Partner Programmed for more information!

## Main Functions

### ● Versatile Voice Calls

Intelligent signaling of super mobile246 supports various voice call types, including Private Call, Group Call, All Call and Emergency Call.

### ● GPS

super mobile246 supports viewing of GPS positioning information and sending of GPS text message.

### ● Data Services

super mobile246 supports data capabilities of sending Private, Group text message. It also supports Third Party to control the radio via Third party API (GPS, Radio Registration Services, Radio Call Control, Telemetry, Data Transfer), via Telemetry control to radio.

### ● Accessory Expansion

super mobile246 supports third party to develop accessories expansion via front and rear port of the mobile. (Check out that features as channel steering, emergency footswitch has been supported via the back port!)

### ● Various Analog Signaling Types

super mobile246 supports various analog signaling types (HDC1200, DTMF phone, 2-Tone and 5-Tone), various squelch control types (CTCSS/CDCSS), thus providing higher function expansion capacity to the analog world.

### ● Supplementary Services

super mobile246 supports supplementary services of Radio Check, Remote Monitor, Call Alert, Radio Enable and Radio Disable.

### ● Multiple Languages

super mobile246 supports up to 15 languages, including English, Simplified Chinese, Traditional Chinese, Thai, Arabic, Farsi, Korean, Portuguese, Italian, Russian, Polish, Turkish, French, Spanish and German, allowing users to select it per their needs.

### ● One Touch

super mobile246 supports One Touch features that comprise of Text Message, Voice Calls and Supplementary Services.

### ● Scan

super mobile246 supports scanning of pure analog voice and signaling

### ● Roaming

super mobile246 supports automatic roaming of all sites in a IP Multi-site Connect system.

### ● Privacy of Voice and Data

super mobile246 supports analog scrambling, and encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to both voice and data.

### ● Analog Telephone Interconnect (via DTMF signaling)

super mobile246 supports simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users. This feature utilizes the Commercial Off The Shelf (COTS) Analog Phone Patch boxes and a Plain Old Telephone Service (POTS) line to connect the radio users to the Corporate Office Phone System (PBX) or Public Switched Telephone Network (PSTN).

### ● Software Upgradable

Upgrade software enables new features without buying a new radio; super mobile246 could also be switched into MPT and DMR trunking modes with corresponding trunking license applied in the same hardware.

## Standard Accessories

Palm Microphone  
Power Cord

Microphone Hanger  
Fuse

Microphone Hanger Screws  
GPS Antenna

Mounting Bracket

# Specifications

General	Frequency Range	245.0000-245.9875MHz;		
	Channel Capacity	80		
	Zone Capacity	64(each with a maximum of 16 channels)		
	Channel Spacing	12.5 KHz		
	Operating Voltage	13.6 V ± 15%		
	Current Drain	Standby	< 0.6A	
		Receive	< 2.0A	
		Transmit	5 W	< 5 A
	Frequency Stability	± 1.5ppm		
	Antenna Impedance	50 Ω		
Dimensions (H×W×D)	60×174×200 mm			
Weight	1.7Kg			
LCD Display	220×176 pixels, 262000 colors, 2.0 inch, 4 rows			
Receiver	Sensitivity	0.3 μ V (12dB SINAD); 0.22 μ V (Typical) (12dB SINAD) 0.4 μ V (20dB SINAD)		
	Selectivity TIA-603 ETSI	65dB @ 12.5KHz / 75dB @ 20/25KHz <sup>a</sup> 60dB @ 12.5KHz / 70dB @ 20/25KHz <sup>a</sup>		
	Intermodulation TIA-603 ETSI	75dB @ 12.5/20/25KHz <sup>a</sup> 70dB @ 12.5/20/25KHz <sup>a</sup>		
	Spurious Response Rejection TIA-603 ETSI	75dB @ 12.5/20/25KHz <sup>a</sup> 70dB @ 12.5/20/25KHz <sup>a</sup>		
	Blocking TIA-603 ETSI	90dB 84dB		
	Hum and Noise	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz <sup>a</sup>		
	Rated Audio Power Output	Internal (@20 ohm load)	3W	
		External (@8 ohm load)	7.5W	
	Max Audio Power Output	Internal (@20 ohm load)	8W	
		External (@8 ohm load)	20W	
	Rated Audio Distortion	≤ 3%		
	Audio Response	+1 ~ -3dB		
Conducted Spurious Emission	< -57dBm			

Transmitter	RF Power Output	Low Power 5W
		High Power 10W
	FM Modulation	11K0F3E @ 12.5KHz;
	Conducted/Radiated Emission	-36dBm<1GHz; -30dBm>1GHz
	Modulation Limiting	± 2.5KHz @ 12.5KHz
	FM Hum & Noise	40dB @ 12.5KHz
	Adjacent Channel Power	60dB @ 12.5KHz
	Audio Response	+1 ~ -3dB
Audio Distortion	≤ 3%	
Environmental Specifications	Operating Temperature	-30°C ~ +60°C
	Storage Temperature	-40°C ~ +85°C
	ESD	IEC 61000-4-2 (level 4) ± 8kV (contact) ± 15kV (air)
	American Military Standard	MIL-STD-810 C/D/E/F/G
	Dust & Water Intrusion	IP54 Standard
	Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard	
GPS (for MD78XK only)	Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)	
	TTFF (Time To First Fix) Cold Start	< 1 minute
	TTFF (Time To First Fix) Hot Start	< 10 seconds
	Horizontal Accuracy	< 10 meters

\* This frequency band is only available for DMR trunking mode

# Optional Accessories



Pictures above are for reference only and may vary from actual products.


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