Features

Voice Services

- Fallback Operation
- Individual call
- Group call
- Broadcast call (TMO)
- Open group call
- DTMF
- Gateway call (DMO)
- Repeater call (DMO)
- Phone call
  - PABX
  - PSTN

- DTMF
- Emergency Call
  - Emergency group call to selected group/ group call to pre-defined group/ individual call/ phone call(PABX/PSTN)
  - HOT MIC
  - Emergency Cycle
  - Configurable emergency priority
  - Location Information Sending (TMO)
  - Silent Emergency Call (TMO)

- Pre-emptive call
- Late entry
- DGNA
- Group Scanning
- Talking Party Identification
- Individual Call Restriction via Phonebook
- Group Change Voice Broadcast
- CAD(Call Authorized by Dispatcher)
- BT
- Notification Talkgroup
- Favorite Folder

Gateway

- Group voice calls from DMO to TMO
- Group voice calls from TMO to DMO
- Emergency group call from DMO to TMO
- Emergency group call from TMO to DMO
- Transmission of Gateway Presence Signal
- Call Pre-emption (in either direction)
- SDS messaging from DMO to TMO
- SDS messaging from TMO to DMO
- Individual call from DMO to TMO
- Individual call from TMO to DMO
- Emergency Individual call from DMO to TMO
- Emergency Individual call from TMO to DMO
- DGNA

DMO Repeater

- ETSI type 1A DMO Repeater for channel efficient operation
- Repeats DMO voice and tone signalling on selected talkgroup
- Repeats SDS and Status messaging on selected talkgroup
- Transmission of Repeater Presence Signal
- Participate & Initiate call in repeater mode

License Control

- DMO Repeater
- Gateway
- TEA2
- E2EE
- Work Order
- MSPD
- OTAP
- SDS template
- Route Trace
- Drive Test

User Security

- Ambience Listening
- Radio User Assignment (RUA)
- Lone worker
- Emergency Protect Mode
- Call out

Data service

- Short Data Service
  - SDS-1, 2, 3, 4, TL
  - Status message
  - Immediate text message (TMO)
  - Long text message (TMO)
- Package Data
  - Single-slot
  - Multi-slot
- Peripheral Equipment Interface (PEI)
- AT command
- OTAP (Over The Air Programming)
- Status Message Solution
- WAP browser
- Circuit Mode Data
- Telemetry
- Short Data Template
- Work Order

Security Service

- Authentication
- Package Data User Authentication
- Air Interface Encryption
- Security Class: Class 1/2/3
- End to End Encryption
  - By Software
  - By SIM card
  - Voice Service / SDS Service
- Temporary Enable/Disable
- Permanently Disable

GPS Location Service

- GPS / GLONASS / Beidou
- Control Center Authentication by MS
- LIP protocol
  - Trigger Conditions (Configured via Air or CPS)
    - Emergency Call
    - Interval
    - Distance
    - Power On/Off
    - Status Message
    - Positioning Loss/Regain
- NMEA location reporting
- Time Synchronization and Adjustment
- Display the calling party's Relative direction & position
- Overspeed Alarm
- Routetrace

User Interface / Display

- Multi-language: more than 16 languages
- Java Platform 2.0
- 25 programmable key: quick access to menu and configured functions
- Multiple Dialing Methods: scroll dialing, dialing directly, alphabetic search, redial via call records, Dialing rules
- User Profiles
- Display reverse
- Customized Terminal Menu
- Customized Tone
- Time synchronization
  - With GPS time
  - With System time
- Configurable maximal/minimum volume
- Accessory Interface
  - Call Back
  - Emergency Alarm
  - AT Command
  - Independent Audio Export
  - Ignition Sense
  - Public Address
- External palm microphone
- Input Method Editor

Hardware Options

Yes: Available   No：Not Available

	MT680 Plus(B)	MT680 Plus(E)	MT680 Plus(S)
BT	No	No	Yes
Gateway	No	No	Yes
GPS	No	Yes	Yes
E2EE	No	Yes	Yes

- B: Basic Version   - E: Excecutive Version   - S: Specialized Version

Specifications

General

Frequency Bands		320-380MHz 380-430MHz 405-475MHz 806-870MHz
Dimensions (H*W*D)	Standard Mount	70 x 184 x 186mm
	Remote Mount	70 x 184 x 66mm(front panel) 70 x 184 x 177.6mm(main unit)
	Desktop Mount	150 x 220 x 291mm
Weight	Standard Mount	1853g
Operating Voltage	Standard Mount Remote Mount	10.8V-15.6V DC (Typical value 13.2V DC)
	Desktop Mount	10.8V-15.6V DC (Typical value 13.2V DC) 100-240V AC/50-60Hz

RF Specifications

RF Channel Bandwidth	25KHz
RF Power Output	10W
RF Power Level Accuracy	± 2dB
Receiver Class	Class A & B
RX Static Sensitivity	-116dBm(Typical: -118dBm)
RX Dynamic Sensitivity	-106dBm(Typical:-108dBm)

Audio Specifications

Maximum Audio Power Output	8W (internal SPK)
Rated Audio Power Output	4W (Internal SPK)

Item	Capacity
Talk Groups - TMO	3000
Talk Groups - DMO	2000
Phonebook	1000
Missed Calls	20
Received Calls	20
Dialed Calls	20
Inbox	400
Outbox	50
Drafts	50
Scan Lists－TMO	61
Folder－TMO	200×200 (200 groups in each list)
Folder－DMO	50×200 (200 groups in each list)

Environmental

Operating Temperature	-30℃～+60℃
Storage Temperature	-40℃～+85℃
Humidity	ETS 300 019 (95%)
Water and Dust Protection	IP54 (main unit) IP67(front panel); IEC60529
Drop, Shock & Vibration	MIL-STD-810 G;ETS 300 019-1-5 5M3

GPS

Sensitivity	≤-146dBm acquisition sensitivity ≤-165dBm tracking sensitivity
Location Accuracy	2.5m CEP
Cold Start (Time to First Fix)	< 35s
Hot Start (Time to First Fix)	< 1s

All specifications are subject to change without notice due to continuous development.

CE IC FCC

MT680 Plus

TETRA Mobile Terminal
MT680 Plus(B) / MT680 Plus(E) / MT680 Plus(S)

Multiple hardware options including basic version, excecutive version and specialized versio.
Distinguished by built-in 4W powerful speaker, remote mount panel IP67 compliance, 10W RF power output, clear digital voice, built-in BT and GPS positioning, the TETRA mobile terminal MT680 Plus will enrich your communication experiences.

www.hytera.com

MT680 Plus

Highlights

Reliable Through Design
Mt680 Plus is designed to comply with **ETSI TETRA Standard, MIL-STD- 810G, IP67 Dust & Water Protection (remote mount panel)** and Hytera ALT Test simulating over years usage. These tests ensure MT680 Plus stand up to the toughest conditions and environment.

High RF Output Power
MT680 Plus boasts a **10 Watt transmit power**, effectively enlarging the workable coverage, including basements and extending coverage indoors. The radio also supports automatic RF power control with 5dB per step, according to the signal strength.

Exceptional Audio
A **newly added noise cancelling solution** gives MT680 Plus audio quality with unprecedented clarity. Voice can be broadcasted clearly even in very noisy environment to assure the key message is received accurately. Hands free duplex call release hands operation and brings true convenience. **Powerful(4W) internal speaker,** decrease the workload of installing an additional external speaker.

Comprehensive Security Protection
Support authentication, AIE with full 4 algorithms TEA1,TEA2,TEA3,TEA4 and E2EE, MT680 Plus brings customer comprehensive security protection.

Multi-option Location Service
MT680 Plus support **GPS, Glonass and Beidou location**.Multi-option system location service lets MT680 Plus be used globally.

Easy Operation
MT680 Plus employs a 2-in-1 large knob to adjust the channel and volume quickly. Large 260K color TFT LCD enables the access of pertinent information with ease, even under bright sunlight.

Gateway Gateway
Repeater Repeater type 1A
BT Built-in BT R4.0
Handsfree call Handsfree Call
806 — MHz 870 DMO full band call: 806-870MHz

MT680 Plus

Ensure efficient critical communication

Multi-option location service
Support GPS, Glonass and Beidou location.

2-in-1 Knob
2-in-1 large knob makes channel switch and volume adjustment quick.

Dust proof and Waterproof
Remote mount panel is IP67 protection guarantees usage in full of dust environment or exposure to wet environment.

DMO Gateway& Repeater
DMO Gateway and Repeater function supported allow DMO coverage improved.

Rugged design
Withstand the tough highly accelerated life test and strict Military standard G test, rugged quality ensure outstanding performance in tough use.

Large size color display
Equipped with large-size TFT LCD clear display delivers you favorable accessibility even under strong sunlight .

Flexible installation
MT680 Plus supports dash mount, desktop mount, remote mount.

Built-in powerful speaker
Built-in 4W powerful speaker assures the clear and loud voice even without the external speaker.

Security protection
Support authentication, E2EE and AIE with full 4 algorithms TEA1, TEA2, TEA3,TEA4.

Built-in BT
Allow wireless accessory adaptation.

Ergonomic Keys
With silica gel key materials, resilient touch experience brings easy operation.

Enhanced audio quality
New added noise cancelling solution ensure voice broadcasted clearly even in very noisy environment.

MIL-STD -810G | Front Panel IP67 | BT | 10W

MT680 Plus Versatile Accessories

Work with terminal in an optimal and most desirable way, our comprehensive MT680 Plus accessories portfolio guarantees the easy, comfortable experience. The basic standard accessories of MT680 Plus include palm microphone, tube fuse, mounting bracket, power cord.

Standard Accessories

- Palm Microphone
- Tube Fuse
- Mounting Bracket
- Power Cord

Optional Accessories

- External Power Supply
- External Speaker
- Antenna
- GPS Antenna
- Foot Switch
- Desktop Microphone
- Data Transmission Cable
- Heavy Duty Noise-canceling Headset
- Keypad Microphone
- Wireless Noise-Cancelling Earpiece With Dual-PTT
- Wireless Ring PTT
- Telephone Style Handset
- IP67 Remote Control Kit

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