## **Standard Accessories**













Tube Fuse POA08



Palm Microphone SM16A1

Mounting Bracket BRK07

## **Optional Accessories**

















**Specifications** 

General Specifications	
Dimensions (H×W×D) (with front panel)	70×184×201mm
Weight (with front panel)	1.9kg
Operating Voltage	10.8V-15.6V(Typical 13.2V)
Talk Groups- TMO	2048
Talk Groups- DMO	1024
Phonebook	512
Scan Lists	20 (20 groups ineach list)
LCD Display	320X240pixels,260K Colors
Environmental Specifications	
Operating Temperature	-25℃ +65℃
Storage Temperature	-40°C +85°C
Humidity	ETS 300 019 (95%)
Water and DustProtection	IP54 (main unit) IP67 (front panel) IEC60529 or GB-4208-93
Drop, Shock & Vibration	MIL-STD-810 C/D/E/F

RF Specifications	
Frequency Range	350-400 MHz 380-430 MHz 450-470 MHz 806-870 MHz
Channel Spacing	25 Khz
RF Power Output	10W
Receiver Class	ETSI EN 392-2/396-2 Class A
RX Static Sensitivity	-112 dBm (typical-116 dBm)
RX Dynamic Sensitivity	-103 dBm (typical -105dBm)
Audio Power Output	4W (internal) 10W (external)
GPS Specifications	
GPS Antenna	High sensitivity omni-directional receiving antenna
Sensitivity	≤-154dBm
Accuracy	≤15m

All Specifications are subject to change without noticedue to continuous developme



Hytera Communications Corporation Limited

HYT Hytera C3 are registered trademarks of Hytera Communications Corporation Ltd.

© 2010 HYTERA, Co., Ltd. All Rights Reserved.

Address: Hytera Tower, Shenzhen Hi-Tech Industrial Park North,Beihuan RD., Nanshan District,Shenzhen,P.R.C. Tel: +86-755-2697 2999 Fax: +86-755-8613 7139 Post: 518057













## Highlights

# Rugged, Durable Designand Easy Operation



The MT680 rugged design is enhanced with a large 260K color TFT LCD enabling the access of pertinent information with ease, even under bright sunlight. User-friendly interface, keypad entry, and powerful (4W) speaker provides excellent operation and communication experience.

### **Exceptional Quality and Flexible Installation**



The MT680 flexibility allows for virtually any install location. You may integrate the front panel with the main unit, or install it separately at a place where you can easily access operation controls. The optional front panel is IP67 compliant, capable of delivering you exceptional performance in extreme conditions.

#### Versatile Services and Functions



The MT680 supports all TETRA voice and data services. With its built-in GPS\* feature, information about your location will no longer be an issue. Optional encryption and recording features will bring you more benefits. The expansion port is another advantage, enabling you to customize your radios feature.



High transmit power (10W) enables you to reach team members long distances. The MT680 enables quick access to TETRA networks and roaming services. Additionally, the MT680 provides powerful interoperability with base stations and terminals of different manufacturers.

### **Functions**

#### Operation Mode

- ITrunking Mode Operation (TMO): communications over TETRAnetwork (half-duplex and full duplex mode)
- Direct Mode Operation (DMO): direct communications between terminals without network intervention (half-duplex mode)

#### Voice Services

- **Group Call**
- Standard Group Call
- Priority Group Call
- **Emergency Group Call**
- Receive Broadcast Call (TMO)
- Late Entry
- ► Talking Party Identification
- ► Announcement Talk Group call
- Individual call
- Standard Individual Call Half Duplex
- Standard Individual Call Full Duplex (TMO) ▶ Priority Individual Call
- ▶ Calling Line Identification Presentation
- ▶ Pre-emption Priority Call PPC

## Telephone Call (PSTN/PABX)

- Full Duplex Operation
- ▶ DTMF
- Calling Line Identification Presentation
- ▶ Pre-emption Priority Call PPC

## User Safety

Dedicated Emergency Button

Built-in high sensitivity GPS

Two-in-one antenna

Bluetooth (optional)★

Fully integrated single-chip GPS receiver

Time Synchronization and Calibration

Built-in Bluetooth and antenna

Full programmable GPS information transmitting mode

Position information transmission during Emergency call

Wireless connection to PTT and audio devices

Automatic search and recognition of valid devices

- ► Talk Group Lock
- ▶ Keypad Lock

Screen Invert

GPS (optional)

# Security Services

- Authentication
- Stun/Revive
- ► Air Interface Encryption

TEA 1 TEA 4

► E2EE (End-to-End Encryption) Security Services ★ E2EE encryption module with full tamper-protection

Multiple Algorithm support

- ► PIN/PUK Code Access
- ► Security Class 1, 2 (3 ★)

### • User Interface Features

- ▶ 16 programmable key for quick access to function
- Multi-function Talk Group Selector and Volume Control Knob
- ▶ 4-way Navigation Keys
- Dedicated Emergency Button
- Call Log: missed/received/dialed lists
- Flexible Dialing (list scroll, direct dial, alphabetic search, last number redial)
- External Palm Microphone
- Adjustable Display Contrast
- 2 Languages (English, Simplified Chinese)
- Selectable Profiles
- ▶ GPS Location Service
  - Built-in high sensitivity GPS
  - Fully integrated single-chip GPS receiver
- Full programmable position update triggers
- Position information transmission during Emergency Alarm
- Time Synchronization and Calibration

#### • Data / Messaging Services

- Short Data Service (SDS) -- 1, 2, 3, 4, TL
- Status Message / Text Message
- New text/status message notification during calls
- ▶ Circuit Data Service ★
- Packet Data Service \*
- Peripheral Equipment Interface (PEI)



Volume and channel dual-function knob



Support split installation



Optional front panel IP67 waterand dust resistance



Emergency butto



Due to continuous technology development, functions with a  $\star$  mark contained in this brochure will be available to future versions of MT680.