MTH800
THE FUTURE OF TETRA, TODAY

MOTOROLA
intelligence everywhere™

FEATURES OVERVIEW

GPS Location Service

Enhance user safety and efficiency with the MTH800. Incorporating the latest semiconductor technology, it includes a highly sensitive, low power consumption GPS receiver. The MTH800 uses a new patented antenna combining TETRA and GPS signal to help ensure optimal positioning of the antenna for GPS coverage. The solution includes a full terminal resident software application providing control of all GPS parameters over the air – no need to touch programmed terminals when changes are required.

Performance

The MTH800 comes packed with power, a new processor and Digital Signalling Processor (DSP) to ensure future applications such as Java, imaging etc will run smoothly and take advantage of the 16M byte flash memory. To allow flexibility for future RF assignments the MTH800 is a full wide band 380-430 MHz terminal.

Audio

While MTH800 includes many exciting new features it is important to not forget the basics – audio quality! To that effect MTH800 has two major improvements; a new larger and more effective 1 Watt speaker as well as a new class D audio amplifier, all together providing exceptional clarity of audio with minimal distortion, even at high audio levels (user customizable sound level).

Colour display

Display technologies are moving fast. Motorola now has a 65,000 colour display included in the MTH800 for ease of use to differentiate display information to the user. The 130 x 130 pixel display provides the ability to view high resolution pictures e.g. missing persons, mug shots etc.

User interface

To harness the power of MTH800 a new easy-to-use graphical user interface is included with assignable shortcuts to menu items, more that 3000 Talk Groups as well as a unified phonebook with 1000 number entries – enough to satisfy even the demanding user.

End-to-End encryption (E2E)*

While compact and lightweight, the MTH800 introduces full E2E encryption. Part of a complete E2E solution from Motorola for customers requiring enhanced operational security, the MTH800 offers support for multiple encryption algorithms and Over-the-Air-Keying using Motorola's Key Management Facility.

Subject to security requirements, the MTH800 may be factory fitted with E2E encryption, can be provisioned in-country or alternatively retrofitted at a later date.

* Future software upgrade

GENERAL SPECIFICATIONS

Dimensions HxWxD mm	141 x 55 x 32
Weight g	196 Radio only 228 with standard 800mAh battery 239 with 1500mAh battery
Battery Capacity mAh	800 Standard Li Ion 1500 Extended Li Ion
Battery Performance	

	Duty Cycle	Battery Capacity (mAh)	Operating Life
	5/5/90	800	> 12 hours
		1500	> 20 hours
	5/35/60	800	> 8 hours
		1500	> 16 hours

Talk time 800 mAh	2 hours
Talk time 1500 mAh	3 hours
Talk Groups – TMO	2048
Talk Groups – DMO	1024
Combined private call, phone and PABX phone book	1000 entries
Text message list	20
Status list	100
Country code/Network code list	100
Scan list	20 lists of 20 groups

Environmental

Operating Temperature °C	-20 to +60
Storage Temperature °C	-40 to +85
Humidity	ETS 300 019-1-7 class 7.3E, up to 95% for 8 hours
Dust and Water	IP54 (cat.2)
Shock, drop and vibration	ETS 300 019-1-7 class 5M3

RF Specifications

Frequency Bands MHz	380-430
RF Channel Bandwidth kHz	25
Switching Bandwidth TMO MHz	50
Switching Bandwidth DMO MHz	50
Transmitter/Receiver Separation MHz	10
Transmitter RF Power Watt	1
RF Power Control	3 steps of 5dB
RF Power Level Accuracy +/- dB	2
Receiver Class	A and B
Receiver Static Sensitivity dBm	-112 minimum (-116 typical)
Receiver Dynamic Sensitivity dBm	-103 minimum (-105 typical)

GPS Specifications

Simultaneous Satellites	12
Mode of operation	Autonomous or assisted (A-GPS)
GPS antenna	Helical integrated into TETRA antenna
Sensitivity	-152 dbm/-182dbW
Accuracy	5 meter (50% probable)* 10 meter (95% probable) * * Measured at -137 dbm

The information contained in this document may be subject to change without further notice
* Please note all product features are subject to infrastructure support
* Selected features are subject to optional software upgrade
* The availability of the accessories included in this document are subject to change without notice