MOTOROLA
intelligence everywhere™

Motorola's market leading portfolio of TETRA products now gives you even more unbeatable choice when developing a communication solution to suit your entire organisation.

The latest addition to our extensive portfolio is the MTH500 slim-line two-way radio, which brings the benefits of TETRA to a wider audience within your organisation. Managers, senior officers, administration and support staff can easily keep in touch with the more traditional users of two-way radio, enabling your organization to benefit from running and maintaining only one wireless communication system. Together with our MTP and MTM700 radios, our portfolio offers you real choice and provides a radio to suit every need.

Stylish & attractive
- Lightweight
- Attractive ergonomic design
- Comfortable to hold

Multi-functional
The MTH500, smallest & lightest TETRA radio on the market is so much more than a two-way radio, it's also a:
- Two-way pager
- Cellular phone
- Speakerphone
- Data modem
- Data Terminal
- Scrambler

Exceptional sound quality
- Proven technology gives you loud, crisp and constant audio
- A front facing speaker means wherever you wear your radio calls will still be clearly heard
- The dedicated speaker and separate earpiece ensure safe audio levels for both duplex and private calls
- Hands-free calls can be made with the inbuilt speakerphone

Far reaching communications
Direct Mode Operation (DMO) ensure that your MTH500 will function even when you are outside the network coverage area.

Security
Built in air encryption and 'radio stun' protect your vital communications.

Cellular style features
- Vibracall
- Predictive text entry – iTap
- Call history for last 10 numbers

Robust and Reliable
The MTH500 features a strong, light, magnesium alloy chassis and is manufactured to a high protection specification complying with IP54 standard. It has been through our Accelerated Life Test which simulates 6 years heavy use in the field to ensure the toughest standards.

MTH500
Motorola TETRA Portable Radio 380-400MHz and 410-430MHz

GENERAL SPECIFICATIONS

Dimensions HxWxD	mm	140 x 55 x 31
Weight	g	154 (radio only)
		193 (800 mAh Li Ion battery)
Battery Capacity	mAh	800 mAh std Li Ion
		1100 mAh extended Li Ion
Operating life (5/5/90)	Hours	12 hrs (800 mAh std Li Ion)
		17 hrs (1100 mAh extended Li Ion)
Operating life (Standby)	Hours	19 hrs (800 mAh std Li Ion)
		27 hrs (1100 mAh extended Li Ion)
Talk Groups- TMO		512
Talk Groups- DMO		208
Individual call list		100
Phone call list		100
PABX call list		25
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		EIA/TIA 603 (95%)
Dust and Water		IP54
Vibration		EIA/TIA 603
Crash Hazard with Vehicle Adaptor		MIL810E method 516-4

RF SPECIFICATIONS

Frequency Bands	MHz	380-400 or 410-430
RF Channel Bandwidth	kHz	25
Switching Bandwidth (TMO)	MHz	10
Switching Bandwidth (DMO)	MHz	20
Transmitter/Receiver Separation (TMO)	MHz	10
Transmitted RF Power	Watt	1 (380-400)
		1 (410-430)
RF Power Control		3 steps of 5dB
RF Power of Accuracy	+/- dB	2
Receiver Class		A and B
Receiver Static Sensitivity	dBm	-112
Receiver Dynamic Sensitivity	dBm	-103

*please note all product features are subject to infrastructure support
*All specifications are subject to change without notice.

Accessories

The MTH500 accessory portfolio includes a complete range of cellular-type accessories with a proven design. These new accessories will respond to the end users' needs, from public safety to commercial markets, where ruggedness is not a necessity.

In-vehicle solutions
- Digital car kit (requires the use of an external antenna)
- Passive in-car cradle (requires the use of an external antenna)
- External antenna UHF 380 - 400 MHz
- External antenna UHF 410 - 430 MHz
- Vehicular power adapter

Chargers
- Dual pocket desktop charger (requires the use of travel charger WALN4092)
- Travel charger (UK and European plugs included)

Batteries
- Standard Li-Ion battery - 800 mAh (includes standard battery door)
- Extended Li-Ion battery - 1100 mAh (includes extended battery door)

Audio accessories
- Personal hands free kit
- Breeze headset with boom microphone and in-line PTT

Carry accessories
- Belt clip
- Soft leather carry case

Cables
- RS232 data cable
- Programming Cable

Voice Services supported – Group:
Group call – TMO
Group call – DMO
Late Entry (TMO/DMO)
Emergency call
Emergency call "Hot Microphone"
Announcement Talk Group call
Dynamic Group Number Assignment (DGNA)
Local site trunking
Scanning
Priority monitor
Talking Party Identification
Loud/discreet audio mode

Voice Services supported – Private call:
Half duplex/duplex operation
Flexible dialing (list scroll, short number dialing, direct dial, alpha search, last number called)
Loud/discreet audio mode
Calling Line Identification Presentation

Voice Services supported – Telephone call (PABX/PSTN):
Full duplex operation
Speakerphone
Flexible dialing (list scroll, direct dial, alpha search, speed dial, one-touch dial)
DTMF overdial
Calling line Identification Presentation

Security services supported:
Air Encryption TEA1
Air Encryption TEA2
Radio Stun
PIN/PUK code access
Keypad lock

Data/messaging services supported:
Short Data Service (SDS)
Alphanumeric Text Service
Predictive Text Entry (iTAP)
Built-in database enquiry templates
Packet data service
Peripheral Equipment Interface (PEI) for external RS232 short and Packet data devices
New text message notification during calls

Other:
5 Languages (English, French, German, Spanish and Dutch)
Keypad tones on/off
Alert tones on/off
Backlight options (disabled and automatic)
Multiple network support
Manual/automatic network selection
Scan list edit via keypad
Side connector for audio accessories
Bottom connector for programming, upgrading, vehicle adapter and packet and short data
Vibracall
Two colours (Blue and Black)

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