



**MOTOROLA**  
intelligence everywhere™



### ***CLEAR COMMUNICATION ON THE MOVE***

If you want to communicate clearly and reliably on the move, the MTM700 mobile terminal from Motorola is the perfect choice. It further reinforces our commitment to developing high quality, durable TETRA solutions for environments where communication and timing are vital. Versatile and adaptable, you can choose to mount it on your dashboard, desktop, motorcycle, remotely or use the data box as a stand alone item without a control head. The MTM700 is also highly robust and easy to use with a large graphic display and emergency button, so it's ideal for police officers, fire fighters or paramedics. And with a combination of high performance voice and data capabilities, it connects and transmits data easily – you can even upgrade with new features. It really is the perfect choice for professionals who want voice, data and encryption integrated in one unit.



**VOICE SERVICES SUPPORTED – GROUP:**

- Group call – TMO/DMO
- Group call – TMO/DMO via a DMO Gateway
- TMO/DMO Programmable Talk Group mapping
- Late Entry – TMO/DMO
- Emergency call – TMO/DMO
- Emergency call "Hot Microphone"
- Announcement Talk Group call
- Hidden Talk Groups
- Dynamic Group Number Assignment (DGNA) - (up to 511 Groups)
- Local site trunking
- Scanning
- Talking Party Identification
- Favourites Talk Group Selection†
- Priority Monitor

**VOICE SERVICES SUPPORTED – PRIVATE CALL:**

- Half duplex/full duplex operation
- Flexible dialing (list scroll, short number dial, direct entry, alphabetic search, last number called)
- Loud/discreet audio mode (via optional handset)
- Calling line Identification Presentation
- Busy User Pre-emption

**VOICE SERVICES SUPPORTED – TELEPHONE CALL (PABX/PSTN):**

- Full duplex operation
- Handsfree operation
- Flexible dialing (list scroll, direct dial, alphabetic search, speed dial, one-touch dial, last number redial)
- DTMF over dial
- Calling line Identification Presentation
- Busy User Pre-emption



**SECURITY SERVICES SUPPORTED:**

- Air Interface Encryption:

**Algorithms**

- TEA1, TEA2

**Security Class:**

- Class 1: Clear
- Class 2: Static Cipher Key (SCK)
- Class 3: Derived Cipher Key (DCK) & Common Cipher Key (CCK)

**Authentication**

- Infrastructure Initiated
- Made mutual by Terminal
- Secure Key Provisioning Tool for Customer use
- User crypto key deletion from keypad
- Radio Stun
- PIN/PUK code access
- Packet data user authentication
- Personal password protected settings

**USER SAFETY:**

- Keypad lock
- Transmit Inhibit (TXI) – Enhanced version
- “Hot” Microphone emergency
- Ambience Listening
- Automatic Microphone Gain adjustment during Hot Microphone and Ambience Listening
- Emergency initiated by external switch (even when the terminal is off)
- Dedicated emergency button

1700



#### **DATA/MESSAGING SERVICES SUPPORTED:**

- Short Data Service (SDS)
- Alphanumeric Text Service (ATS)
- Built-in database enquiry templates
- One touch status messaging
- Packet data service
- Peripheral Equipment Interface (PEI) for external RS232 short and packet data devices
- New text message notification during calls
- Database enquiry during calls
- Ability to read text messages during calls
- Ability to send text messages from busy talk group
- Automatic status message sent on entering/exiting Transmit Inhibit mode
- WAP support using packet data services via PEI

#### **USER INTERFACE FEATURES:**

- Alphanumeric Talk Group search
- Loud/discreet audio mode toggle (via optional handset)
- Keypad tones on/off
- Alert tones on/off
- Backlight options (disabled, manual, automatic and semi-automatic)
- Backlight intensity manually adjusted via front panel
- Multiple network support
- Scan list edit via keypad
- Address book edit via keypad
- 5 pre-programmed languages (English, French, German, Spanish and Dutch)
- User definable display languages (ISO 8859-1 characters)
- 2 dedicated context sensitive menu softkeys
- 3 dedicated programmable function buttons

- One-touch functions on numeric keypad
- One-touch Phone/Private/PABX/Status/Talk group/TXI/Database template/Text message template
- Transmit grant tone on/off
- Full access to menu system during calls
- Call history received/dialed lists

#### **OTHER:**

- Wideband RF operation (one model supports multiple RF bands)
- Multiple software upgrade capability
- Programming software automatic logging of logistical information
- Optional rugged IP57 motorcycle control head

## **ENHANCE YOUR MTM700 MOTOROLA TETRA MOBILE TERMINAL WITH A WIDE RANGE OF ACCESSORIES**

Professional users of mobile radios have specific needs, requirements and working conditions within a highly demanding environment. Motorola provides complete two-way radio communication solutions with a wide selection of microphones, speakers, in-vehicle accessory kits and remote mounting kits. Professional users can customise their MTM700 mobile terminal to satisfy their individual communications needs above and beyond those already incorporated in the standard package.

### **SPEAKERS**

#### **SUITABLE FOR DESKTOP AND IN-VEHICLE SOLUTIONS**

GMSN4066	External speaker 13 watts
GMSN4078	Compact external speaker 5 watts

### **DESKTOP SOLUTION**

**OFFERS A SIMPLE AND EASY-TO-INSTALL "MOBILE IN TRAY" OPTION SUITABLE FOR LOCAL DISPATCHING OPERATIONS. THE FOLLOWING ACCESSORIES ARE REQUIRED:**

#### **AUDIO ACCESSORY**

GMMN4064	Desktop microphone
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#### **MOUNTING OPTION**

GLN7318	Desktop Tray without speaker
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#### **POWER SUPPLY**

GPN6145	Desktop power supply
GKN6266	DC power cable

#### **PLUG OPTIONS**

NTN7373	US Plug
NTN7374	Euro Plug
NTN7375	UK Plug



## IN-VEHICLE SOLUTIONS

The following accessories allow mobile terminal customisation over and above the standard mounting option. Suits professional end users' needs and caters for different vehicles and dashboards. The following accessories are available.

### AUDIO ACCESSORIES

**GMUN1006 Telephone style handset kit**

Ergonomically designed for professionals seeking the increased privacy of a slim line telephone style handset with PTT. Supports both Duplex and PTT calling. Includes two programmable buttons for added functionalities such as loudspeaker enable/disable and "request to send".

**GMMN4063 Fist microphone**

Provides remote microphone and PTT for convenient one-handed mobile terminal operation. Robust construction with coiled cord for strain relief.

**GMMN4065 Directional Visor microphone**

Slick new design, catering for professionals working in vehicles for extended periods of time. Particularly suited for installations with high background noise and where the visor microphone is sheltered from outside wind.

**GMMN1033 Omni-directional Visor microphone**

This visor microphone offers alternative operational performance, especially designed to cater for installations where wind outside the vehicle may blow across the microphone.

### PUSH-TO-TALK OPTIONS (FOR REMOTE PTT OPERATION):

RLN4856	Remote footswitch PTT
RLN4857	Push button PTT
RLN4858	Gooseneck PTT
RLN4836	Emergency footswitch PTT

### MOUNTING OPTIONS:

GLN7317	High profile mounting trunnion
GLN7324	Low profile mounting trunnion
PMLN4492	3 metre remote mount kit
PMLN4493	5 metre remote mount kit
PMLN4494	7 metre remote mount kit
PMLN4495	3 metre remote mount expansion kits
PMLN4496	5 metre remote mount expansion kits
PMLN4497	7 metre remote mount expansion kits
RKN4077	3 metre Remote Mount Cable
RKN4078	5 metre Remote Mount Cable
RKN4079	7 metre Remote Mount Cable
RLN4779	Key lock mount

### POWER CABLES:

GKN6270	3 metre 12V power cable to battery with fuse (10A)
GKN6274	6 metre 12V power cable to battery with fuse (10A)
HKN9327	6 metre ignition sense cable with fuse (3A)

### ANTENNAS:

FAE5521	Rooftop mount 380-400 MHz
FAE6003	Rooftop mount 410-430 MHz
HAF4002	Rooftop mount 806-870 MHz

### MISCELLANEOUS SPECIALISED ACCESSORIES:

GKN6270	External alarm relay
GLN7282	Buzzer kit

### DATA:

GMKN4079	Mobile SB9600 cable
GMKN1016	RS232 Data interface cable (800 MHz only)
GMKN1022	Active Data Cable (for short and packet data transfer)
GMKN4067	Programming cable



## MTM700 Motorola TETRA Mobile Terminal 380-430 MHz and 806-870 MHz

### GENERAL SPECIFICATIONS

Dimensions HxWxD	mm	49x170x155 (radio only) 72x185x53 (standard control head) 58x185x58 (Motorcycle control head)
Weight	g	1350 (radio only) 1650 (radio with control head) 448 (Motorcycle control head only)
Talk groups –TMO		512
Talk groups –DMO		208
Private 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	-30 to +60
Storage Temperature	°C	-40 to +85
Humidity		ETS 300 019-1-5 class 5.1 and 5.2 EIA/TIA 603 (95%)
Dust and Water Standard control head		IP54 (cat.2)
Dust and Water Motorcycle control head		IP57 (cat.2)
Shock, drop and vibration		ETS 300 019-1-5 class 5M2 and 5M3 MIL 810 C/D/E/F

### RF SPECIFICATIONS

Frequency Bands	MHz	380-430 or 806-870
Transmit Band	MHz	380-430 or 806-825
Receive Band	MHz	380-430 or 851-870
DMO Band	MHz	380-430 or 851-870
RF Channel Bandwidth	kHz	25
Switching Bandwidth (TMO)	MHz	50 (380-430) 19 (851-870)
Switching Bandwidth (DMO)	MHz	50 (380-430) 19 (851-870)
Transmitter/Receiver Separation	MHz	10 (380-430) 45 (806-870)
Transmitter RF Power	Watt	3 (380-430) 3 (806-870)
	Class	3
RF Power Control		4 Steps of 5 dB
RF Power Level Accuracy	+/- db	2
Receiver Class		A and B
Receiver Static Sensitivity	dBm	-112 minimum -114 typical
Receiver Dynamic Sensitivity	dBm	-103 minimum -105 typical

\*Please note all product features are subject to infrastructure support.

\*All specifications are subject to change without notice.

\*Selected features are subject to optional software upgrade.

\*The availability of the accessories included in this brochure is subject to change without notice.



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MTM700/BRO-ENG (08/03)