

PTX700, PTX760 & PTX780 Specifications

GENERAL - VHF, UHF	PTX700	PTX760	PTX780
*Frequency:	136 - 174 / 330 - 400 / 403 - 470 / 450 - 527		
Channel Capacity:	16 Channels per Conventional Mode		
Power Supply:	Provided through rechargeable battery - 7.5V		
DIMENSIONS:			
H x W x D (Radio footprint height excluding knobs)			
With Standard High Capacity NiMH Battery:	137 mm x 57.5 mm x 37.5 mm	137 mm x 57.5 mm x 37.5 mm	152 mm x 57.5 mm x 37.5 mm
With Ultra High Capacity NiMH Battery:	137 mm x 57.5 mm x 40.0 mm	137 mm x 57.5 mm x 40.0 mm	152 mm x 57.5 mm x 40.0 mm
With NiCD Battery:	137 mm x 57.5 mm x 40.0 mm	137 mm x 57.5 mm x 40.0 mm	152 mm x 57.5 mm x 40.0 mm
With Lilon Battery:	137 mm x 57.5 mm x 33.0 mm	137 mm x 57.5 mm x 33.0 mm	152 mm x 57.5 mm x 33.0 mm
WEIGHT:			
With Standard High Capacity NiMH Battery:	420 gm	428 gm	460 gm
With Ultra High Capacity NiMH Battery:	500 gm	508 gm	535 gm
With NiCD Battery:	450 gm	458 gm	485 gm
With Lilon Battery:	350 gm	358 gm	390 gm
AVERAGE BATTERY LIFE @ 5/5/90 CYCLE			
With Standard High Capacity NiMH Battery:	Low Power 11 hours	High Power 8 hours	
With Ultra High Capacity NiMH Battery:	14 hours	11 hours	
With NiCD Battery:	12 hours	9 hours	
With Lilon Battery:	11 hours	8 hours	
Sealing: Withstands rain testing per MIL-STD 810 C/D / E and IP54			
Shock and Vibration: Protection provided via impact resistant housing exceeding MIL-STD 810 C/D/E and TIA/EIA 603			
Dust and Humidity: Protection provided via environment resistant housing exceeding MIL-STD 810 C/D/E and TIA/EIA 603			

TRANSMITTER SPECIFICATION			
	VHF	UHF I / UHF II	330-400 MHz
*Frequency	136 -174	403 - 470 450 - 527	330 - 400
Channel spacing	12.5/20/25kHz		
Freq Stability(-25°C to 55°C,+25°CRef.)	+/- 2.5ppm		
Power	5W	4W	4W
Modulation limiting	±2.5 @12.5kHz / ±4.0 @20kHz/ ±5.0 @ 25kHz		
Hum & Noise	-40 dB		
Conducted/Radiated Emission	-36dBm <1GHz -30dBm >1GHz		
Adjacent Channel Power	-60dB @ 12.5kHz -70dB @ 20/25kHz		
Audio Response (from 6dB/octave pre-emphasis 300-3000Hz)	+1 to -3dB		
Audio Distortion	3%		

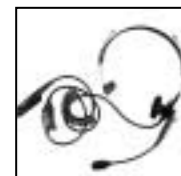
RECEIVER SPECIFICATION			
	VHF	UHF I / UHF II	330-400 MHz
*Frequency	136-174	403 - 470 450 - 527	330 - 400
Channel spacing	12.5/20/25kHz		
Freq Stability(-25°C to 55°C,+25°C Ref.)	+/- 2.5 ppm		
Sensitivity (12dB SINAD)EIA	25µV		
Sensitivity (20dB SINAD)ETS	50µV		
Intermodulation(EIA)	70dB		
Adjacent Channel Selectivity	60 dB @ 12.5kHz/70dB @ 20/25kHz		
Spurious Rejection	70dB		
Rated Audio	5 W		
Hum and Noise	-40 dB @ 12.5kHz, -50dB @ 20/25kHz		
Audio Response(300-3000Hz)	+1 to -3dB		
Conducted Spurious Emission ETS 300 086	-57dBm < 1 Ghz -47dBm > 1 Ghz		
Audio Distortion @ Rated Audio	3%		

Data for +25°C unless otherwise specified

*Availability subject to country law and regulations.

Radios meet applicable regulatory requirements.

All specifications shown are subject to change without notice. Specifications are not representative of all radios and may vary in different radios.



Light Weight Head Set
AZ6MN4018



NiMH Battery & Belt Clip
PMMN4008



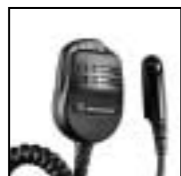
Carry Case
HLN9701



Multi-unit Charger
PMTN4028



Rapid-rate Desktop Charger
PMTN4025



Remote Speaker Microphone
PMMN4002

Enhance Your Radio's Capabilities

A comprehensive range of accessories is available so that Motorola's MPT-Trunked Professional Radio Series can be customised to suit your unique applications. Adding the proper headsets, microphones, batteries, chargers or carry cases can enhance the productivity of the two-way radio users. Motorola accessories are built with the highest quality standards and are specially engineered to ensure maximum performance for your radio, no matter what profession you're in.



Visit us at www.motorola.com/cgiss/AP

MOTOROLA and the stylized M logo are trademarks of Motorola, Inc.
© Motorola, Inc. 2002


THE POWER TOOL FOR CONTACT & CONTROL

PTX SERIES PORTABLE RADIOS

PTX700

PTX760

PTX780


Motorola: Reliability & Quality


ACCELERATED LIFE TESTING
Stringent Motorola Accelerated Life Testing simulates five years of hard use in real life. EIA RS-3168 in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



MIL-STD 810C, D AND E
Stamp of approval from the U.S. Military for use in rough environments.



ISO 9001 STANDARD
Compliance with ISO 9001 Standard - an international quality system assurance on design, development, production, installation and servicing of a product.

PTX series

Introducing Motorola's MPT-Trunked Professional Radio Series

Different professions have different communication needs. That's the simple reason why Motorola offers 3 different models in its MPT-Trunked Professional Radio Series – PTX700, PTX760 & PTX780.

Each of the models in the series has its own distinctive, easy-to-use features; offering users a wide range of capabilities to accomplish their unique tasks, while at the same time, tapping the extensive benefits offered by the widely accepted MPT1327 trunking system.

The MPT1327 trunking system is a signalling standard that defines an open air interface of speech and data services between radio terminals and the system. An MPT1327 system manages the network and radio users, synchronises and schedules call requests, calls individuals and groups of radio users and conducts call maintenance.

Motorola's MPT-Trunked Professional Radio Series conforms to the MPT1327 signalling standard and supports major dialling plans such as MPT1343, RegioNet 43 and ANN.

Audio Technology

As with any radio, sound quality is critical for effective communications. Motorola's MPT-Trunked Professional Radio series can be heard in almost any environment because of Motorola's unique voice compression and expansion technology called X-PAND™. X-PAND enables crisper, clearer and stronger audio quality, allowing users to continue communicating even in noisy conditions. In addition, Low Level Expansion allows further improvements in audio quality by reducing noise usually heard during pauses in conversation.

Data Messaging and MAP27

The PTX700/760/780 provide data messaging directly from the radio or via the MAP27 data interface. Through this feature, commonly-used statements in the business can be pre-programmed into the 32 status messages for quick communication. This feature also enables

the radio to store up to 10 data messages as well as data messages of any length can be sent via the traffic channel between radios with appropriate modem equipment. Moreover, with the MAP27 standard protocol, users can benefit from the remote control of radio functionalities from the data equipment.

Wideband And Programmable Channel Spacing (12.5/20/25 KHZ)

The series deploys wideband technology and allows programmable channel spacing of 12.5/20/25 kHz; offering flexibility in deployment and stocking.

Option Board

Through option boards such as Voice Storage, the series' capabilities can be expanded to incorporate the recording of messages for later follow-up.

Lithium Ion Battery Option

Accompanied with the latest technology in battery chemistry, Motorola's MPT-Trunked series offers a Lithium Ion battery option which provides high power at a lighter weight.

Feature	PTX700	PTX760	PTX780
Multiple Personalities	2	4	60
Dynamic re-group	Yes	Yes	Yes
Contact list	16	40	40
Speed-dial	-	Yes	Yes
Programmable Dedicated Call Button	3	3	6
Individual call	Yes	Yes	Yes
Group call	Yes	Yes	Yes
Fleet call	Yes	Yes	Yes
Interfleet call	Yes	Yes	Yes
Broadcast call	Yes	Yes	Yes
Emergency button & calls	Yes	Yes	Yes
PABX/PSDN calls	Yes	Yes	Yes
Non-prescribed data	Yes	Yes	Yes
MAP27 interface	Yes	Yes	Yes
Menus	-	Yes	Yes
Alpha-numeric decode of incoming calls	-	Yes	Yes
Missed calls stack	1	5	10
Voice storage	Option	Option	Yes
Call barring	-	Yes	Yes
Alpha-numeric short data status	-	Yes	Yes



PTX700 – The Popular Radio

The PTX700 is the affordable communication solution for professionals who require a rugged and reliable radio to stay in contact. This popular radio increases productivity, keeping users communicating, whilst allowing them to concentrate on their jobs.

Multiple Personalities

Configurable for up to 2 personalities - Trunked (inclusive of Talkgroup Select mode) and/or Conventional to suit different communication needs.

Dynamic Regrouping

Enables the field radio to be reassigned to flexible groupings over the air, without the necessity to return the radio to the workshop for reprogramming.

Missed Call Alerts

Ability to store incoming caller identities; prompting the user to return the calls received, therefore eliminating the risk of losing important calls.

Emergency Call

Addressing the need for urgent communications in emergency crises, the PTX700 provides an immediate call set-up capability, even when the system is busy or during overloaded periods.

Low Battery Warning

Notifies users when the battery is running low through the LED indicator and alert tone.

2 Dedicated Buttons

Easy-to-use, the PTX700 can be programmed for common calls to be accessed at the convenience of a single touch.



PTX700

PTX760

PTX780

PTX760 – THE VERSATILE RADIO

The PTX760 is essential for growing organisations because it offers an expandable list of features which can be easily programmed in the field. Easily adaptable no matter which industry it is used in, this versatile radio is the communication tool that grows with your organisation.

Building upon the wide-ranging features of the PTX700, the PTX760 has the following additional offerings:

4 Personalities

Configurable for up to 4 multiple personalities - Trunked (inclusive of Talkgroup Select mode) and/or Conventional; offering users the flexibility in meeting their diverse communication needs.

User Indication

The 14 character alpha-numeric display contains useful icons and information; such as a radio signal strength indicator which informs users of the signal strength in the vicinity and a battery gauge icon which alerts users on battery strength – key information that assists users in ensuring optimum communication efficiency. The PTX760 also provides distinctive ringing tones and alpha-tagging of incoming calls, enabling audio and visual caller-identification.

Fast Access Dialling and Intuitive Menus

One-touch dialling (dedicated and speed-dial buttons), easy to use menus and an alpha-numeric phonebook/contact list make the full power of the radio simple and intuitive to use.

PTX780 – THE SOPHISTICATED RADIO

In many organisations, there is a need for professionals to communicate using the highest level of MPT radio sophistication. The PTX780 helps improve your efficiency and productivity, with a high level of communication control. It is the epitome of two-way professionalism in the palm of your hand.

The PTX780, takes communication sophistication to the next level, by offering advanced features beyond the PTX700 and PTX760. Ideally suited for users with complex communication needs.

60 Personalities

Configurable for up to 60 multiple personalities - Trunked (inclusive of Talkgroup Select mode) and/or Conventional; for users that need to adapt quickly to their ever-changing communication requirements.

User Indication

This large 4-line alpha-numeric display enables users to read messages quickly without the need for time-consuming scrolling. The display also features a battery gauge icon which alerts users on battery strength and a radio signal strength indicator which informs users of the signal strength in the vicinity. In addition, it provides distinctive ringing tones and alpha-tagging of incoming calls, enabling audio and visual caller-identification.

Built-in voice storage

Instead of relying on pen and paper for lengthy instructions, users can benefit from a feature in the PTX780 which provides the storage and retrieval of voice messages. With built-in voice storage, the radio also offers a voice prompt for callers to leave voice messages which are stored in the radio.

THE ADVANTAGES OF TRUNKING

With the onset of trunking systems, a new dimension has been added to the capabilities of business communications; enabling both organisations and companies to achieve higher levels of efficiency and productivity at lower costs.

When you invest in trunked radio communications, a radio channel will be automatically assigned to you for two-way conversations. With today's limited availability for frequency use, trunked networks allow users to share resources effectively without incurring additional costs.

Additional Benefits for Trunked Networks are:

- Wider coverage than private mobile radio networks
- Ability to send and receive voice and information
- Highly efficient and cost effective

Key Trunking Markets

- Public safety organisations such as the military, police and emergency services
- Public utilities
- Transportation agencies handling rail, port and airports
- Businesses such as those in construction, courier, security, convention and service industries.