Motorola 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, easyto-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.



ACCESSORISE AND 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.

KEY ACCESSORIES:





Microphone





Multi-unit charger

THE ADVANTAGES OF TRUNKING

With the onset of trunking systems, a new dimension has been added to the capabilities of business communications; enabling organisations 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.

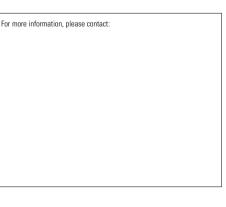
ADDITIONAL BENEFITS FOR TRUNKED NETWORKS ARE:

- 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
- Transportation agencies handling rail, port and airports
- Businesses such as those in construction, courier, security, convention and service industries.

http://www.motorola.com/cgiss/AP





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TWO-WAY RADIOS

PTX700 PTX760 PTX780

THE POWER TOOL FOR CONTACT AND CONTROL



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-PANDTM.

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.

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.

Motorola's MPT-Trunked Professional Radio Series conforms to the MPT1327 signalling standard

One-Year Warrant

and ANN.

Cach Motorola radio is backed by a one-year warranty on radio parts and labour on the battery, charger, antenna and belt clip.



M Accelerated Life Testing Motorola's Accelerated Life Testing simulates five years of hard use in real life, EIA RS-316B in Shock, Vibration, Dust, Humidity, IP54 for Sealing

and supports major dialling plans

such as MPT1343, RegioNet 43

MIL-STD 810C, D and E 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.

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

Using 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.



PTX700

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.

PTX700 THE POPULAR RADIO

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 an emergency, 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.



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 INFORMATION

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 alphatagging 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.



DATA MESSAGING AND MAP27

The PTX780 provides 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.

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/PSTN calls	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
Non-prescribed data	_	_	Yes
MAP27 interface	Yes	Yes	Yes

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	Low Power		High Power	
With Standard High Capacity NiMH Battery:	11 h	ours 8 h	8 hours	
With Ultra High Capacity NiMH Battery:	14 h	ours 11h	11hours	
With NiCD Battery:	12 h	ours 9 h	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/EIA603			

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

Data for +25°C unless otherwise specified

* Availability subject to country law and regulations / Specifications subject to change without notice.

All specifications shown are typical. Radios meet applicable regulatory requirements.

	VHF	UHF I / UHF II	330-400 MHz
*Frequency	136-174	403-470	330-400
		450-527	
Channel spacing	12.5/20/25 kHz		
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)	70 dB		
Adjacent Channel Selectivity	60 dB @ 12.5 kHz/70 dB @ 20/25 kHz		
Spurious Rejection	70 dB		
Rated Audio	.5 W		
Hum and Noise	-40 dB @ 12.5 kHz, -50 dB @ 20/25 kHz		
Audio Response(300-3000Hz)	+1 to -3dB		
Conducted Spurious Emission	-57dBm < 1 GHz		
ETS 300 086	-47dBm > 1 Ghz		
Audio Distortion @ Rated Audio	3%		