

PM400™ Mobile Two-Way Radios With LTR® Trunking



Built in versatility that's ideal for Agriculture, Construction, Manufacturing, Transportation and Utilities.



Great care was taken in the design of the PM400 to ensure its ruggedness and reliability as well as its ease of use and functionality. The PM400 offers the most features and channels of any Motorola mobile in our Commercial Series and can be mounted in just about any vehicle. It also serves as an ideal desktop base station in the office or on the factory floor. The PM400 is ideal for many businesses and industries such as agriculture, hospitality, light construction, light industrial, manufacturing, public administration, delivery services, security, taxi and limousine services, transportation/fleet and utilities.

Conventional/LTR Programmable Features

- **64 Conventional Channels**
- **System Scan**
- **12.5/20/25 kHz Switchable Channel Spacing**
- **Dual Priority Scan** (Conventional Only)
- **2 Memory Channels** (Conventional Only)
- **Busy Channel Lockout** (Conventional Only)
- **Option Board Expandability**
- **High/Low Power Settings**
- **Local/Distance Mode**
- **Time-Out Timer**

Conventional/LTR Signaling Features

- **MDC1200 Emergency** (Encode - Conventional Only)
- **MDC1200 PTT ID** (Numeric ID - Encode/Decode)
- **MDC1200 Selective Radio Inhibit** (Decode)
- **MDC1200 Radio Check** (Decode)
- **Quik Call II™ Call Alert** (Encode/Decode - Conventional Only)
- **Quik Call II™ Selective Call** (Encode/Decode - Conventional Only)
- **DTMF PTT ID** (Encode - Conventional Only)
- **DTMF Call Alert** (Encode - Conventional Only)
- **DTMF Selective Call** (Encode - Conventional Only)

LTR Features

- **Up to 100 Talkgroups**
- **Mixed Assignment of Conventional Personalities & LTR® Talkgroups**
- **Up to 10 Sites & 100 Talkgroups**
- **Up to 20 Repeaters per Site**
- **Up to 4 Universal IDs per System**
- **Up to 40 Universal IDs per Radio**
- **User Programmable Scan & Phone Lists**
- **Data Operated Squelch (DOS)**

Specifications

GENERAL	VHF	UHF
Frequency:	146-174 MHz	438-470, 465-495MHz
Channel Capacity:	64	64
Technical RF Output:	Low:1-25W, High: 25W	Low:1-25W, High: 25-40W
Dimensions: (H x W x D)	1.73 x 6.67 x 4.64 inch (44 x 169 x 118 mm)	1.73 x 6.67 x 4.64 inch (44 x 169 x 118 mm)
Weight:(radios only)	2.25 lbs (1.02 Kg)	2.25 lbs (1.02 Kg)
Current Drain:	Standby: 0.3A Rx@ rated, external 8 ohm speaker: 1.5A Transmit: 7A (25W), 9.5A (45W)	0.3A 1.5A 8A (25W), 9A (40W)
FCC Designation:	AZ492FT3805 (25W), ABZ99FT3046 (25-45W)	AZ492FT4856 (25W), ABZ99FT4048 (25-40W) ABZ99FT4049 (25-40W)
RECEIVER		
Frequency:	146-174 MHz	438-470, 465-495 MHz
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Sensitivity: (12dB EIA SINAD)	0.35µV (12.5 kHz) typical, 0.3µV (25 kHz) typical	0.35µV (12.5 kHz) typical, 0.3µV (25 kHz) typical
Adjacent Channel Selectivity:	65dB (12.5 kHz), 75dB (25 kHz)	60dB (12.5 kHz), 70dB (25 kHz)
Intermodulation:	65dB (12.5 kHz), 75dB (25 kHz)	60dB (12.5 kHz), 70dB (25 kHz)
Frequency Stability: (-30° C to +60° C)	+/-2.5ppm	+/-2.5ppm
Spurious Rejection:	-75dB	-70dB
Rated Audio:		
(extended audio with 4 ohm speaker)	4W internal, 13W external	4W internal, 13W external
Audio Distortion @ Rated Audio:	3% typical	3% typical
Hum and Noise:	-40dB (12.5 kHz) -45dB (25 kHz)	-35dB (12.5 kHz) -40dB (25 kHz)
Audio Response:	+1, -3dB	+1, -3dB
Conducted Spurious Emission:	-57dBm < 1GHz -47dBm > 1GHz	-57dBm < 1GHz -47dBm > 1GHz
TRANSMITTER		
Frequency:	146-174 MHz	438-470, 465-495 MHz
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30° to +60° C, +25° C)	+/-2.5ppm	+/-2.5ppm
Modulation Limiting:	+/-2.5 kHz (12.5 kHz) +/-4 kHz (20 kHz) +/-5 kHz (25 kHz)	+/-2.5 kHz (12.5 kHz) +/-4 kHz (20 kHz) +/-5 kHz (25 kHz)
FM Hum and Noise:	-40dB (12.5 kHz), -45dB (25 kHz)	-35dB (12.5 kHz), -40dB (25 kHz)
Conducted/Radiated Spurious Emission:		
1-25 W	-36dBm < 1GHz -30dBm > 1GHz	-36dBm < 1GHz -30dBm > 1GHz
25-45 W	-26dBm	-26dBm
Adjacent Channel Power :	-60dB (12.5 kHz), -70dB (25 kHz)	-60dB (12.5 kHz), -70dB (25 kHz)
Audio Response:	+1, -3dB	+1, -3dB
Audio Distortion:	3% typical	3% typical
FM Modulation:	11K0F3 (12.5 kHz), 11K0F3 (12.5 kHz) 16K0F3E (25 kHz), 16K0F3E (25 kHz)	11K0F3 (12.5 kHz), 11K0F3 (12.5 kHz) 16K0F3E (25 kHz), 16K0F3E (25 kHz)

PORTABLE MILITARY STANDARDS 810 C, D, & E

	MIL-STD 810C	MIL-STD 810D	MIL-STD 810E
Applicable MIL-STD	Method: Proc	Method: Proc	Method: Proc
Temp. Shock:	503.1: I	503.2: I	503.3: I
Solar Radiation:	505.1: I	505.2: I	505.3: I
Salt Fog:	509.1: I	509.2: I	509.3: I
Vibration:	514.3: I Cat 1	514.3: I Cat 1	514.4: I Cat 1
Shock:	516.2: I, III	516.3: I, V	516.4: I, V
Rain:	506.1: II	506.2: II	506.3: II
Dust:	510.1: I	510.2: I	510.3: I

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	-30° C to +60° C
Storage Temperature:	-40° C to +85° C
Thermal Shock:	-40° C to +80° C
Humidity:	95% RH @ 8 Hrs
Water and Dust Intrusion:	IP54
Packing Test:	Impact Test

Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

*All specifications subject to change without notice.

